

Модули IGBT ixys купить в Минске

www.fotorele.net www.tiristor.by радиодетали, электронные компоненты
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Мы не работаем с частными (физическими) лицами.

Мы работаем только с юридическими лицами(организациями) и ИП и только по безналичному расчёту.
подробно смотрите ниже: описание, характеристики, datasheet QR код

Модуль, igbt, ixys купить в Минске

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подробно смотрите ниже: описание, технические характеристики, datasheet, фото, каталог

QR код

YS



WestackLITE - Modular Solutions

A simple but highly efficient range of stacks incorporating the new **WESPACK** range of phase control thyristors.

Currently available in 3 standard configurations:

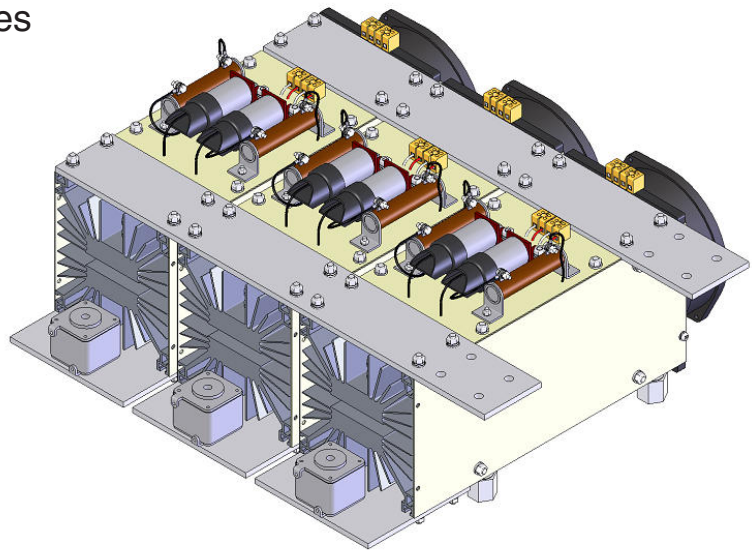
AC voltage regulators

Single-phase bridges

Three-phase bridges

These stacks can easily be modified to meet individual customer requirements.

Fully dimensioned drawings are available upon request from the Chippenham Factory.



Features and Benefits

WESPACK devices provide the maximum power rating for weight and volume without compromising on quality and reliability.



Cooling is provided by means of a low noise dual voltage (230V/115V) ac fan that is protected against overloading by an integral thermal cut-out.

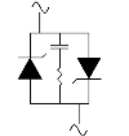
Surge suppression and fusing can be added to protect the devices from voltage transients and short circuits.

ISO 9000 2000 provides the standard against which all our products and services are measured.

WestackLITE - Modular Solutions

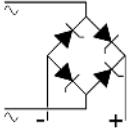
AC regulators

Approx. total loss $1.3 \cdot I_{RMS}$

Assembly Part Number	I _{DC} amps Air Forced 5m/s			I _{FSM} amps I _{TSM} amps	I ² t A ² s	Dimensions mm			Mass kg	Device Type and Quantity	Heat Sink Type	
	T _a = 25°C	T _a = 35°C	T _a = 45°C			Fig.	W	H				
SXC1195FR	1195	1098	997	19100	1.82x10 ⁶	1	168	415	212	10	N1806QK (2)	(2x150. 1x330)
SXC1464FR	1464	1348	1227	32400	5.25x10 ⁶	1	168	415	212	10	N2367MK (2)	(2x150. 1x330)
SXC1788FR	1788	1636	1480	50900	12.95x10 ⁶	1	168	415	212	10	N3904HK (2)	(2x150. 1x330)

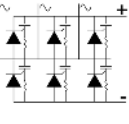
Single phase fully controlled bridges

Approx. total loss $2.5 \cdot I_{DC}$

Assembly Part Number	I _{DC} amps Air Forced 2.5m/s			I _{FSM} amps I _{TSM} amps	I ² t A ² s	Dimensions mm			Mass kg	Device Type and Quantity	Heat Sink Type	
	T _a = 25°C	T _a = 35°C	T _a = 45°C			Fig.	W	H				
SXC1076FB	1076	988	897	19100	1.82x10 ⁶	2	330	415	212	20	N1806QK (4)	(2x150. 1x330)
SXC1318FB	1318	1213	1104	32400	5.25x10 ⁶	2	330	415	212	20	N2367MK (4)	(2x150. 1x330)
SXC1609FB	1609	1473	1332	50900	12.95x10 ⁶	2	330	415	212	20	N3904HK (4)	(2x150. 1x330)

Three phase fully controlled bridges

Approx. total loss $3 \cdot I_{DC}$

Assembly Part Number	I _{DC} amps Air Forced 2.5m/s			I _{FSM} amps I _{TSM} amps	I ² t A ² s	Dimensions mm			Mass kg	Device Type and Quantity	Heat Sink Type	
	T _a = 25°C	T _a = 35°C	T _a = 45°C			Fig.	W	H				
SXC1517FG	1517	1396	1270	19100	1.82x10 ⁶	3	492	415	212	30	N1806QK (6)	(2x150. 1x330)
SXC1871FG	1871	1725	1573	32400	5.25x10 ⁶	3	492	415	212	30	N2367MK (6)	(2x150. 1x330)
SXC2319FG	2319	2125	1926	50900	12.95x10 ⁶	3	492	415	212	30	N3904HK (6)	(2x150. 1x330)

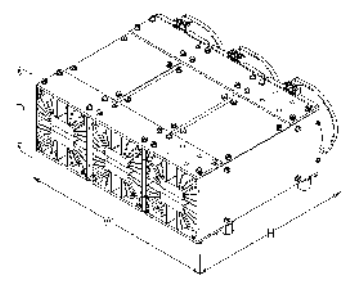
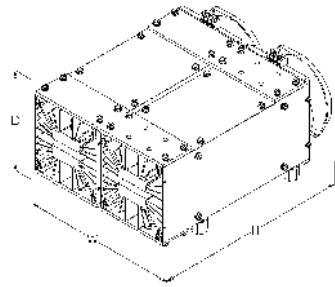
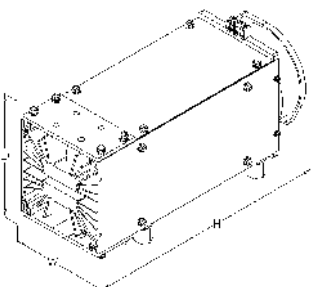
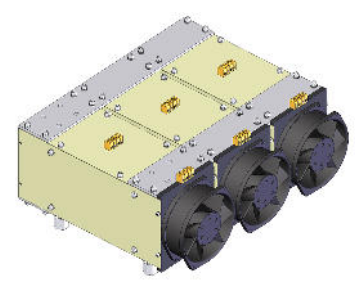
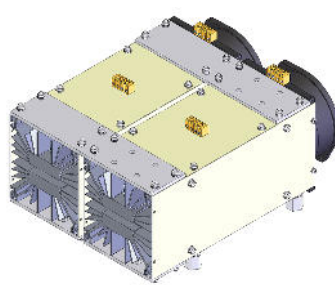
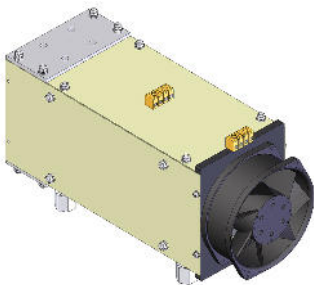
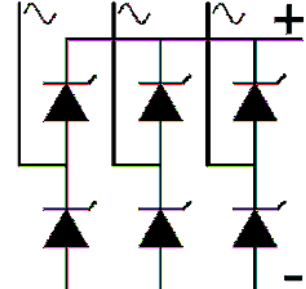
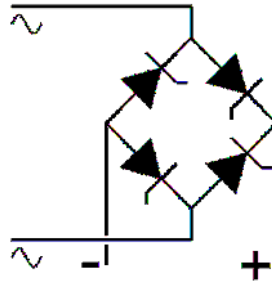
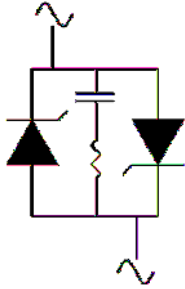


Figure 1
Weight 10 kg

Figure 2
Weight 20 kg

Figure 3
Weight 30 kg

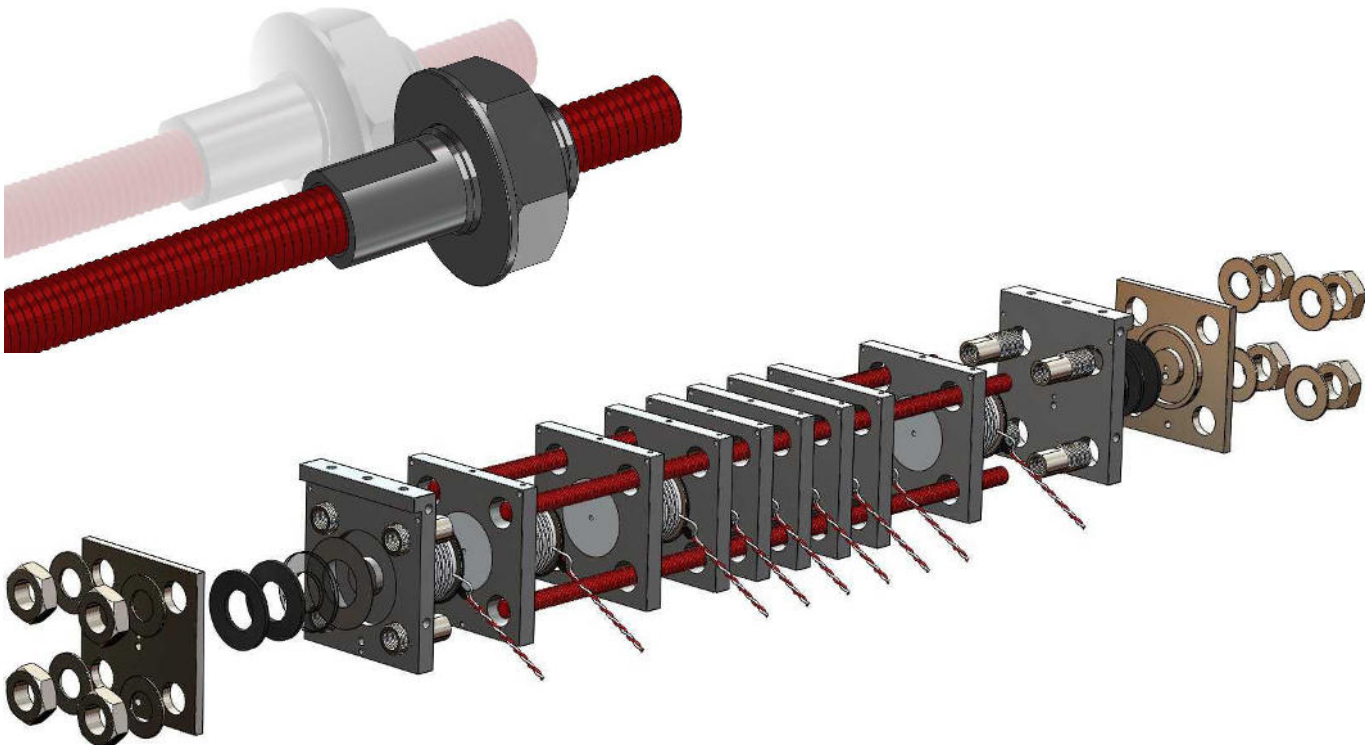
Power Semiconductor Accessories

As part of our continuing commitment to meet our customers' demands, we offer a range of products to support our high power semiconductor devices and our silicon assembly business.

The following pages show a selection of accessories available to our customers, from heatsinks and coolers, to bar or box clamps, to mounting grease!

Part No.	Old Part Number	Accessory
XSGSCX13		Press Pack Semiconductor Mounting Grease - supplied in 1kg tins
XST1000M08P	PTFE1000M8	M8 PTFE tube x 1m length insulation
XST1000M10P	PTFE1000M10	M10 PTFE tube x 1m length insulation
XST1000M12P	PTFE1000M12	M12 PTFE tube x 1m length insulation
XST1000M16P	PTFE1000M16	M16 PTFE tube x 1m length insulation
L0001YC600XXX	n/a	30mm diameter poleface Insulator Capsule
L0001QC600XXX	n/a	38mm diameter poleface Insulator Capsule
L0001NC600XXX	n/a	47mm diameter poleface Insulator Capsule
L0001HC600XXX	n/a	66mm diameter poleface Insulator Capsule
L0001ZF600XXX	n/a	73mm diameter poleface Insulator Capsule
L0001TC600XXX	n/a	75mm diameter poleface Insulator Capsule

Part No.	Old Part Number	Accessory	Type
XSL200D8WRC	U9948	200mm long single Co-Axial cable. Red / White. M5 ring terminal for Ø75 IGBT & below	IGBT
XSL200D8WRCP	U9947	200mm long double Co-Axial cable. Red / White. M5 ring terminal for Ø85 IGBT & above	IGBT
XSL220C2WRT		220mm long twisted pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL300C2WRP	U9900	300mm long pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL300C2WS	U9900 (Gate Only)	300mm long gate wire. Silicone sleeve cable 16/0.2. White. M4 ring terminal	Thyristor
XSL350C2WRP	U9723	350mm long pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL400C2WRP	U9860	400mm long pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL500C2WRP	U9855	500mm long pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL600C2WRP	U9775	600mm long pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL1000C2WRP	U9734/U9801/U9849	1000mm long pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL1000C2WRT	U9952	1000mm long twisted pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor
XSL1100C2WRT	U9779	1100mm long twisted pair. Silicone sleeve cable 16/0.2. Red / White. M4 ring terminal	Thyristor



We can supply discrete parts, kits of parts or complete assemblies to satisfy your requirements. Please contact the Chippenham Factory for further information.

Standard base clamp kits for rectifier diodes and phase control thyristors

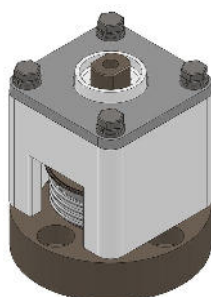
These Single side cooled square base mounting clamps are suitable for 34 mm to 50 mm pole face devices with clamping force in the range from 1130 Kgf to 2140 Kgf. Suitable for devices with blocking voltages from 400 volts up to 6 KV.

Part No.	Poleface Ref.	Outline Ref.
XK1500CB034M *	34-38	WC64
XK1130SB076M	34-38	WC65
XK2140SB076M	47-50	WC66

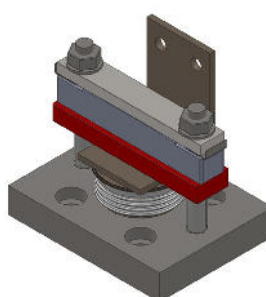
Standard part replacements to the obsolete flat-base power silicon diodes types KBN/R. KCN/R & KDN/R. For other voltages and thyristor options please consult factory.

Part No.	Old square base part no.	Base polarity	V_{RRM} V	I_{Iav} $T_C = 100^\circ C$ A	I_{RSM} kA	I^2t A ² s	V_0 V	r_T m Ω	R_{th} K/W	Temp °C	Outline
W1185LC450KBR *	SW45KBR515	Anode	4500	435	10.2	520 x 10 ³	1.000	0.575	0.085	160	WC64
W1185LC450KBN *	SW45KBN515	Cathode	4500	380	10.2	520 x 10 ³	1.000	0.575	0.101	160	WC64
W1411LC360KBR *	SW36KBR595	Anode	3600	505	12.2	744 x 10 ³	0.900	0.388	0.085	160	WC64
W1411LC360KBN *	SW36KBN595	Cathode	3600	445	12.2	744 x 10 ³	0.900	0.388	0.101	160	WC64
W1524LC300KBR *	SW30KBR636	Anode	3000	540	13.4	898 x 10 ³	0.870	0.323	0.085	160	WC64
W1524LC300KBN *	SW30KBN636	Cathode	3000	470	13.4	898 x 10 ³	0.870	0.323	0.101	160	WC64
W1748LC220KBR *	SW22KBR805	Anode	2200	660	13.5	911 x 10 ³	0.870	0.280	0.085	175	WC64
W1748LC220KBN *	SW22KBN805	Cathode	2200	582	13.5	911 x 10 ³	0.870	0.280	0.101	175	WC64
W2058LC120KBR *	SW12KBR935	Anode	1200	760	16.1	1.30 x 10 ⁶	0.790	0.192	0.085	175	WC64
W2058LC120KBN *	SW12KBN935	Cathode	1200	665	16.1	1.30 x 10 ⁶	0.790	0.192	0.101	175	WC64
W1185LC450KCR	SW38KBR515	Anode	4500	455	10.2	520 x 10 ³	1.000	0.575	0.080	160	WC65
W1185LC450KCN	SW45KBN515	Cathode	4500	395	10.2	520 x 10 ³	1.000	0.575	0.097	160	WC65
W1411LC360KCR	SW36KBR595	Anode	3600	530	13.2	756 x 10 ³	0.900	0.388	0.080	160	WC65
W1411LC360KCN	SW36KBN595	Cathode	3600	460	12.3	759 x 10 ³	0.900	0.388	0.097	160	WC65
W1524LC300KCR	SW30KBR635	Anode	3000	565	13.4	898 x 10 ³	0.870	0.323	0.080	160	WC65
W1524LC300KCN	SW30KBN636	Cathode	3000	490	13.4	898 x 10 ³	0.870	0.323	0.097	160	WC65
W1748LC220KCR	SW22KBR805	Anode	2200	690	13.5	911 x 10 ³	0.870	0.280	0.080	175	WC65
W1748LC220KCN	SW22KBN805	Cathode	2200	600	13.5	911 x 10 ³	0.870	0.280	0.097	175	WC65
W2058LC120KCR	SW12KBR935	Anode	1200	800	16.1	1.30 x 10 ⁶	0.790	0.192	0.080	175	WC65
W2058LC120KCN	SW12KBN935	Cathode	1200	690	16.1	1.30 x 10 ⁶	0.790	0.192	0.097	175	WC65
W3082MC450KDR	SB45KDR680	Anode	4500	1115	26.6	3.54 x 10 ⁶	0.923	0.192	0.037	160	WC66
W3082MC450KDN	SB45KDN680	Cathode	4500	1030	26.6	3.54 x 10 ⁶	0.923	0.192	0.041	160	WC66
W3708MC350KDR	SB35KDR820	Anode	3500	1240	33.7	5.68 x 10 ⁶	0.958	0.112	0.037	160	WC66
W3708MC350KDN	SB35KDN820	Cathode	3500	1145	33.7	5.68 x 10 ⁶	0.958	0.112	0.041	160	WC66
W3842MC280KDR	SB25KDR950	Anode	2800	1325	33.5	5.61 x 10 ⁶	0.831	0.118	0.037	160	WC66
W3842MC280KDN	SB25KDN950	Cathode	2800	1225	33.5	5.61 x 10 ⁶	0.831	0.118	0.041	160	WC66
W5636MC150KDR	SB15KDR14C	Anode	1500	2035	43.9	9.64 x 10 ⁶	0.698	0.059	0.037	175	WC66
W5636MC150KDN	SB15KDN14C	Cathode	1500	1875	43.9	9.64 x 10 ⁶	0.698	0.059	0.041	175	WC66

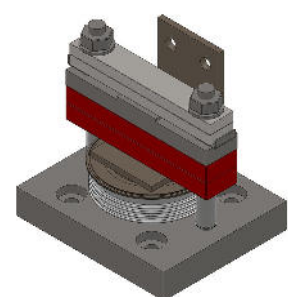
* = Assembly supplied either as kit of parts or sub-assembly with selected diode or thyristor



WC64



WC65



WC66

Standard Bar Clamps

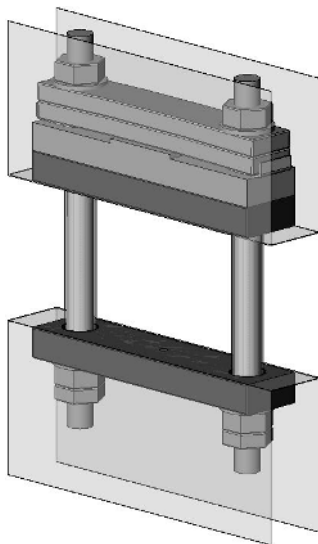
Part No. ○ Not for new design *	Fixing Centres mm	Rod Size	Capsule Device				Outline No.
			Outline	Mounting Surface Diameter mm	Nominal Thickness mm	T _j Max °C	
XK0450DA056M XK0450DT056M XK0450SA056M	65	M8	DO-200AA / TO-200AB	19.0	13.8	190	WC2 WC3 WC1
XK0550DA056M XK0550SA056M	65	M8	GTO	29.5	16.0	190	WC5 WC4
○ XK0900DA056M ○ XK0900DT056M XK0900SA056M	65	M8	Diode / Thyristor	25.1	14.6	190	WC7 WC8 WC6
XK0600DA074M XK0600SA074M	89	M10	Press-Pack IGBTs	47.0	27.0	190	WC10 WC9
XK1000DA074M XK1000SA074M	89	M10	Press-Pack IGBTs	47.0	27.0	190	WC12 WC11
XK1100DA076M	89	M10	DO-200AB / TO-200AC	34.0	26.2	190	WC13
XK1130DA076M XK1130DT076M XK1130SA076M	89	M10	DO-200AB / TO-200AC	34.0	26.2	190	WC15 WC16 WC14
XK1800DA076M XK1800DT076M XK1800SA076M	89	M10	Wespack PCT	38.0	14.0	190	WC18 WC19 WC17
XK2100DA076M XK2100DA076ML XK2100SA076M XK2100SA076ML	89	M10	GTO	47.0	27.0	190 125 190 125	WC21 WC20
○ XK2140DA076M ○ XK2140DA076ML ○ XK2140DT076M ○ XK2140DT076ML XK2140SA076M XK2140SA076ML	89	M10	DO-200 / Thyristor	47.0	26.8	190 125 190 125 190 125	WC23 WC24 WC22
XK2700DA076M XK2700DT076M XK2700SA076M	89	M10	Wespack PCT	50.0	14.0	190	WC26 WC27 WC25
XK2000DA114M XK2000SA114M	132	M12	Press-Pack IGBTs	75.0	26.0	190	WC29 WC28
XK2500DA114M XK2500SA114M	132	M12	Press-Pack IGBTs	75.0	26.0	190	WC31 WC30
XK2500DA116M XK2500DA116ML XK2500SA116M XK2500SA116ML	132	M12	GTO	63.0	26.0	190 125 190 125	WC33 WC32
○ XK3000DA116M ○ XK3000DA116ML XK3000SA116M XK3000SA116ML	132	M12	DO-200AD / Thyristor	63.0	33.0	190 125 190 125	WC35 WC34
XK3500DA116M XK3500DA116ML XK3500SA116M XK3500SA116ML	132	M12	GTO	75.0	26.0	190 125 190 125	WC37 WC36
○ XK4000DA116M ○ XK4000DA116ML XK4000SA116M XK4000SA116ML	132	M12	Diode / Thyristor	73.0	36.8	190 125 190 125	WC39 WC39

Standard Bar Clamps

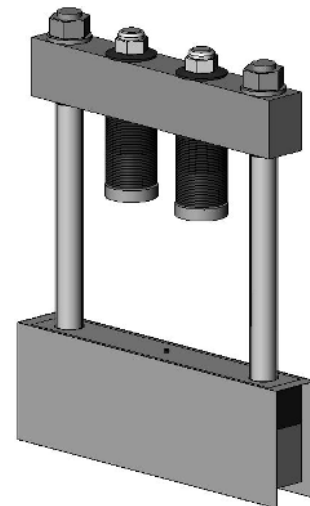
Part No. ○ Not for new design *	Fixing Centres mm	Rod Size	Outline	Capsule Device			Outline Ref.
				Mounting Surface Diameter mm	Nominal Thickness mm	T _j Max °C	
XK5000DA128M XK5000DA128ML	146	M16	GTO	75.0	26.0	190 125	WC40
XK7000DA128M XK7000DA128ML	146	M16	Diode / Thyristor	75.0	26.6	190 125	WC41
XK3060DA140ML XK3060SA140ML	154	M12	Press-Pack IGBTs	85.1	26.0	125	WC43 WC42
XK9000SA160M XK9000SA160ML	180	M16	Thyristor	99.3	35.8	190 125	WC44
XK9000DA160M XK9000DA160ML	180	M16	Thyristor	99.3	35.8	190 125	WC45
XK6120DA180ML XK6120SA180ML	196	M16	Press-Pack IGBTs	125.0	26.0	125	WC46 WC47

* For new replacement part see page 152

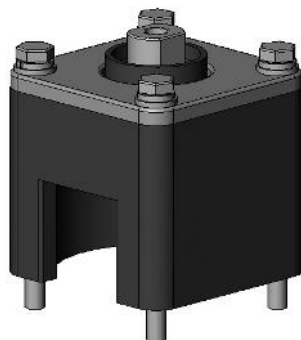
Outline drawings are available from pages O-01...O-30



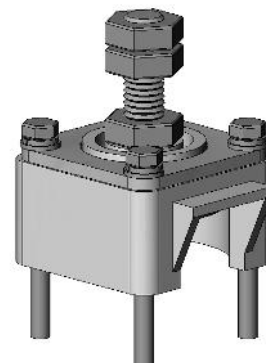
WC 18



WC 45



WC 50

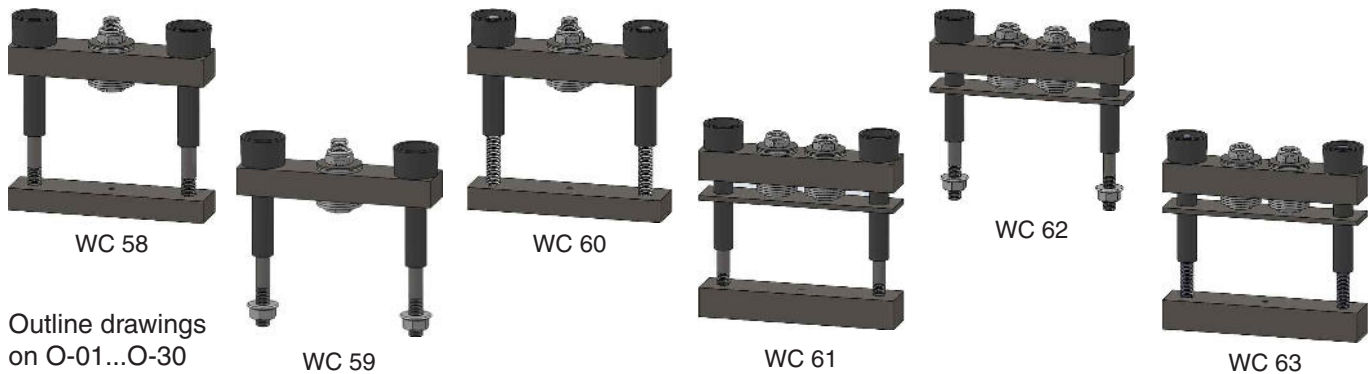


WC 48/49

Bar Clamps - new range!

Range	Part number	### = Force kgf	Max cell dia mm	T _{JMAX} °C	xxx = max Z - dim range mm	Outline
XSK042	XSK####DA042Mxxx	0500/0900	42	190	025-076*	WC58
	XSK####DT042Mxxx	0500/0900	42	190	025-076*	WC59
	XSK####DF042Mxxx	0500/0900	42	190	025-076*	WC60
XSK054	XSK####DA054Mxxx	0900	54	190	025-076*	WC58
	XSK####DT054Mxxx	0900	54	190	025-076*	WC59
	XSK####DF054Mxxx	0900	54	190	025-076*	WC60
XSK056	XSK####DA056Mxxx	0500/0900/1500	56	190	038-120*	WC58
	XSK####DT056Mxxx	0500/0900/1500	56	190	038-120*	WC59
	XSK####DF056Mxxx	0500/0900/1500	56	190	038-120*	WC60
XSK065	XSK####DA065Mxxx	0500/0900/1500	65	190	038-120*	WC58
	XSK####DT065Mxxx	0500/0900/1500	65	190	038-120*	WC59
	XSK####DF065Mxxx	0500/0900/1500	65	190	038-120*	WC60
XSK075	XSK####DA075Mxxx	0900/1500/2200	75	190	038-120*	WC58
	XSK####DT075Mxxx	0900/1500/2200	75	190	038-120*	WC59
	XSK####DF075Mxxx	0900/1500/2200	75	190	038-120*	WC60
XSK087	XSK####DA087Mxxx	1500/2200/3000	87	190	038-120*	WC61
	XSK####DT087Mxxx	1500/2200/3000	87	190	038-120*	WC62
	XSK####DF087Mxxx	1500/2200/3000	87	190	038-120*	WC63
XSK103	XSK####DA103Mxxx	2200/3200/4000	103	190	038-120*	WC61
	XSK####DF103Mxxx	2200/3200/4000	103	190	038-120*	WC63
XSK112	XSK####DA112Mxxx	2800/3200/3800/4500	112	190	038-120*	WC61
	XSK####DF112Mxxx	2800/3200/3800/4500	112	190	038-120*	WC63
XSK120	XSK####DA120Mxxx	3800/4500/5000	120	190	050-120*	WC61
	XSK####DF120Mxxx	3800/4500/5000	120	190	050-120*	WC63
XSK126	XSK####DA126Mxxx	3800/4500/5000	126	190	050-120*	WC61
	XSK####DF126Mxxx	3800/4500/5000	126	190	050-120*	WC63

* contact factory for available sizes



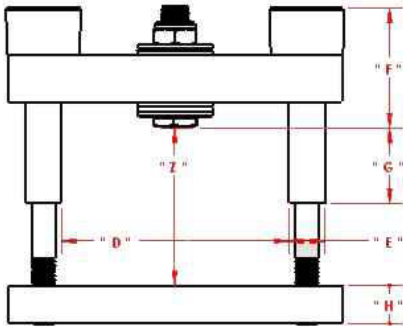
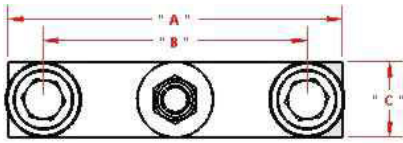
Range	A	A1	B	C	C1	D	E	F	G	H	Fixing
XSK042	69.85	74.89	54.00	15.88	21.04	42.00	8.64	PCF	PCF	12.70	M6
XSK054	82.55	86.04	65.00	15.88	21.04	54.00	8.62	34.93	PCF	12.70	M6
XSK056	95.25	-	70.00	25.40	-	56.00	12.19	PCF	PCF	9.53	M8
XSK065	104.39	-	79.00	25.40	-	65.00	12.19	PCF	PCF	12.70	M8
XSK075	112.78	-	89.00	25.40	-	75.00	12.19	PCF	PCF	12.70	M8
XSK087	127.00	-	102.00	25.40	-	87.00	12.19	PCF	PCF	19.05	M8
XSK103	144.78	154.11	118.00	25.40	36.00	103.00	PCF	PCF	PCF	19.05	M8
XSK112	165.02	-	132.00	25.40	36.00	112.00	16.56	PCF	PCF	25.40	M10
XSK120	172.72	-	140.00	25.40	36.00	120.00	16.56	PCF	PCF	25.40	M10
XSK126	181.10	-	146.00	25.40	36.00	126.00	16.56	PCF	PCF	25.40	M10

PCF = Dimension is dependent on clamp force and cell height. Please consult factory

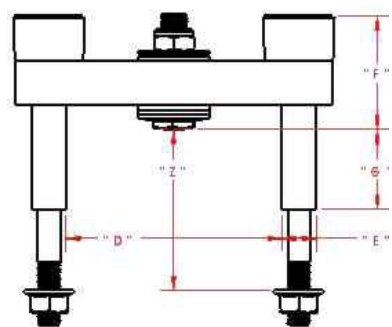
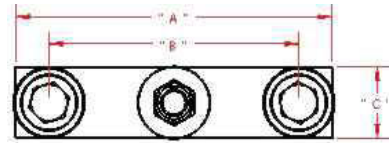
All dimensions above in mm and relate to outline drawing notation

Bar Clamps Outline Drawings

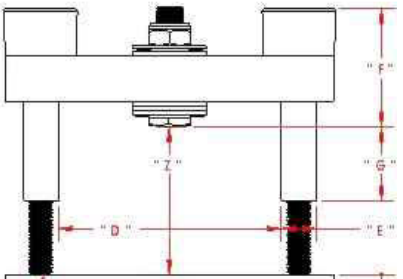
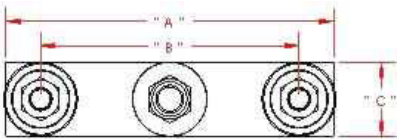
WC58 DA



WC59 DT

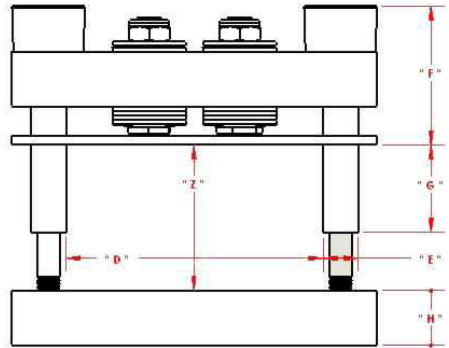
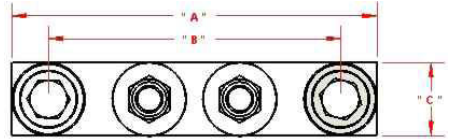


WC60 DF

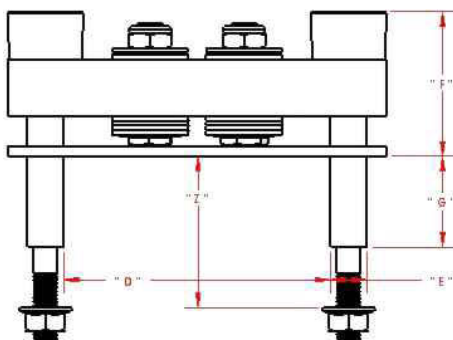
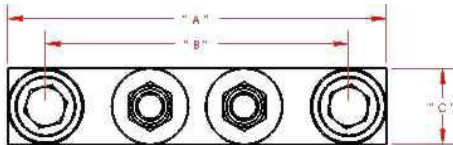


RODS LOCKTITE INTO THE BOTTOM BAR [ALL THE WAY]

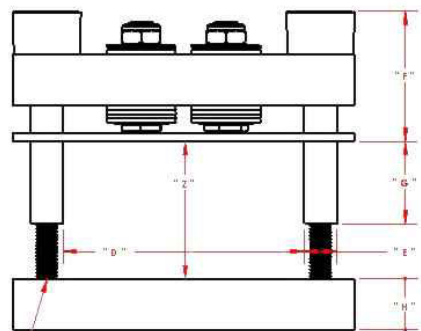
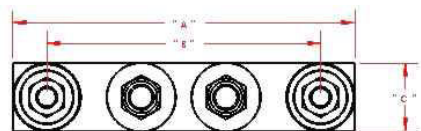
WC61 DA



WC62 DT



WC63 DF



RODS LOCKTITE INTO THE BOTTOM BAR [ALL THE WAY]

Bar Clamps for WESPACK™ and GTO range

Part No.	Rod Size & Length mm	Insulator Size & Length mm	Fixing centres	Pole Face	Clamp Forces	„Z“ mm	„D“ mm	Fig. No.
XSK1500DA076038	M8 x 90	M8 x 60	89	32	10kN to 20kN	38	27.5	WC51
XSK1500DA076076	M8 x 130	M8 x 95				76	62.5	
XSK1500DA076101	M8 x 160	M8 x 120				101	87.6	
XSK2000DA076038	M8 x 95	M8 x 60	89	38	13kN to 20kN	38	25.9	WC52
XSK2000DA076076	M8 x 130	M8 x 95				76	61.0	
XSK2000DA076101	M8 x 160	M8 x 120				101	85.9	
XSK3000DA076038	M8 x 100	M8 x 65	89	50	25kN to 31kN	38	26.2	WC53
XSK3000DA076076	M8 x 130	M8 x 100				76	56.1	
XSK3000DA076101	M8 x 160	M8 x 125				101	86.1	
XSK3400DA076038	M8 x 100	M8 x 65	89	50	27kN to 34kN	38	24.6	WC54
XSK3400DA076076	M8 x 140	M8 x 105				76	64.5	
XSK3400DA076101	M8 x 160	M8 x 130				101	89.7	
XSK3800DA116M076	M10 x 150	M12 x 100	132	66	32kN to 38kN	76	59.7	WC55
XSK3800DA116M101	M10 x 180	M12 x 125				101	84.6	
XSK4400DA116M076	M10 x 150	M12 x 105	132	68	36kN to 44kN	76	63.0	WC56
XSK4400DA116M101	M10 x 180	M12 x 130				101	87.9	
XSK6000DA116M076	M10 x 150	M12 x 105	132	75	50kN to 60kN	76	59.9	WC57
XSK6000DA116M101	M10 x 180	M12 x 130				101	84.8	

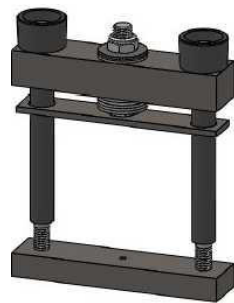
Note: 1 Kgf = 9.8 Newtons

T_{JMAX} = 190°C

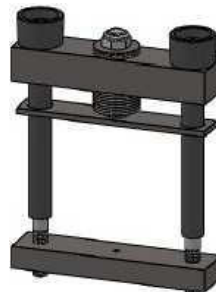
Outline drawings are available from pages O-01...O-30



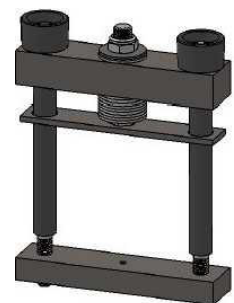
WC51



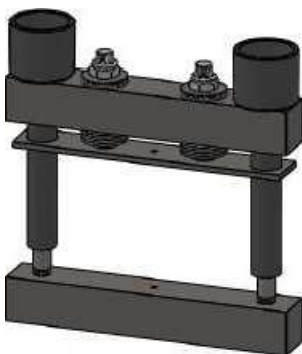
WC52



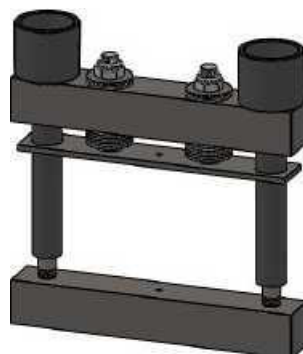
WC53



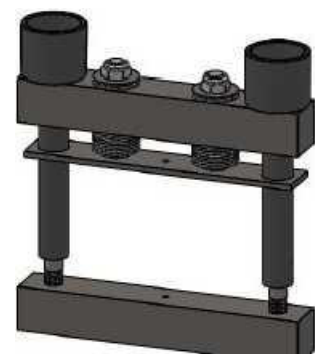
WC54



WC55



WC56



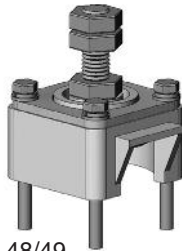
WC57

Box Clamps

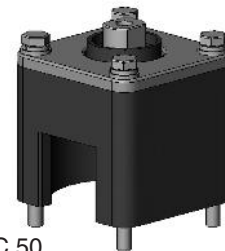
Part No.	Moulded Box Style	Fixing Centres mm	Rod Size	Capsule Device			Outline Ref.
				Outline	Mounting Surface Ø mm	Nominal Thickness mm	
➤ XK0450BA019M XK0450BB019M	Injection Compression	50 PCD	M5x50 Bolts	DO-200AA/TO-200AB	19.0	13.8	WC48
XK0450BA025M XK0450BB025M	Injection Compression	50 PCD	M5x50 Bolts	DO-200AA/TO-200AB	25.1	14.6	WC49
➤ XK1000BA025M	Injection	50 PCD	M5x50 Bolts	DO-200AA/TO-200AB	25.1	14.0	WC49
XK1500BA025M	Injection	50 PCD	M5x50 Bolts	DO-200AA/TO-200AB	25.1	14.0	WC49
XK1500BA034M	Injection	70 PCD	M6x50 Bolts	DO-200AB/TO-200AC	34.0	26.2	WC50

Note: 1 Kgf = 9.8 Newtons

Outline drawings are available from pages O-01...O-30



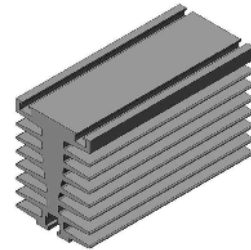
WC 48/49



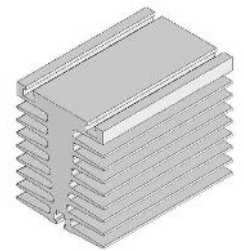
WC 50

Heatsinks

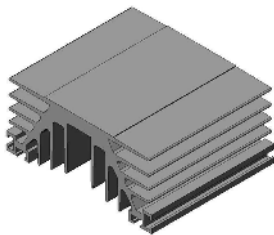
Part No.	Weight Kg/m	Periphery mm	Area mm ²	Fig. No.
XSFGxxxxAN	8.1	1059	2979	WH1
XSFGAxxxxAN	15.6	1682	5867	WH2
XSFHxxxxAN	12.7	1684	4655	WH3
XSFTxxxxAN	20	2065	7573	WH4
XSFTBxxxxAN	29	2467	10905	WH5
XSFTCxxxxAN	28	2544	10561	WH6
SXFLPxxxxAN	30	6620	11172	WH7
SXF46xxxxAN	20	2822	7411	WH8
SXF30xxxxAN	Dimensions 125mm x 125mm x 4 vanes			WH9



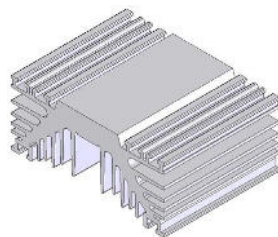
WH1



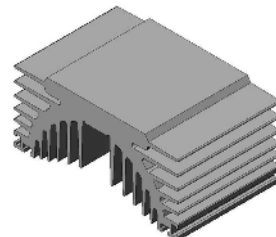
WH2



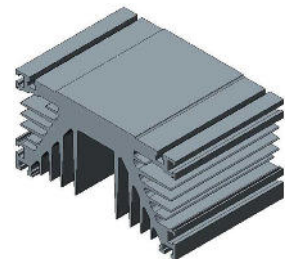
WH3



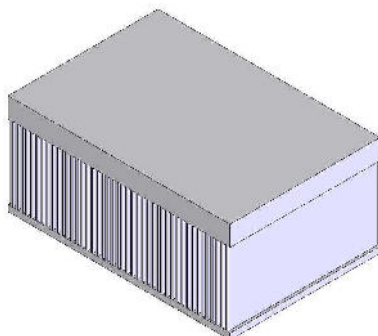
WH4



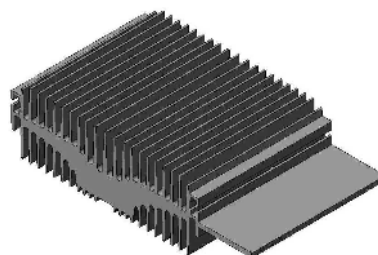
WH5



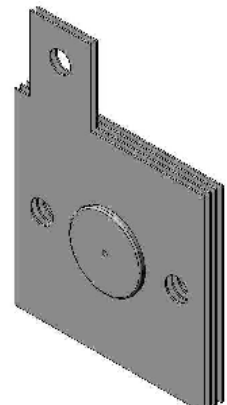
WH6



WH7



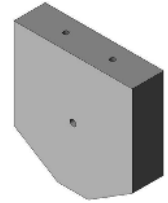
WH8



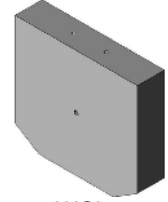
WH9

Coolers

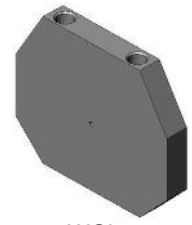
Part No.	Weight Kg	Cooler Thickness mm	Busbar Thickness mm	Description	Fig. No.
XW076NC16A	0.418	16	N/A	47mm WC Cu	WCL2
XW076NC16B	0.612	16	6.4	47mm WC Cu with Busbar (10mm Hose)	WCL1
XW076NC16BS				47mm WC Cu with Busbar + spirol pins fitted (10mm Hose)	WCL1
XW076NC16BT				47mm WC Cu with Busbar + thermostat hole (10mm Hose)	WCL1
XW076NC16C				47mm WC Cu with Busbar (1/2" Hose)	WCL1
XW076NC16CT				47mm WC Cu with Busbar + thermostat hole (1/2" Hose)	WCL1
XW076NC16R	0.581	16	6.35	47mm WC Cu reversed with Busbar	WCL12
XW076NC16W	0.400	16	N/A	47mm WC Cu reversed	WCL13
XW116ZC20A	1.300	20	N/A	73mm WC Cu	WCL4
XW116ZC20B	1.750	20	10	73mm WC Cu with Busbar	WCL3
XW116ZC20C	2.120	20	10	73mm WC Cu with alt. Busbar	WCL5
XW116ZC20R	1.672	20	10	73mm WC Cu reversed with Busbar	WCL14
XW116ZC20W	1.119	20	N/A	73mm WC Cu reversed	WCL15
XW127EN15A	0.375	15	N/A	85mm WC Al Nitride	WCL8
XW127EN15B				85mm WC Al Nitride without holes	WCL8
XW127EC25A	1.650	25	N/A	85mm WC Cu Helix	WCL16
XW127EC25B	2.200	25	8	85mm WC Cu with Busbar Helix	WCL17
XW127EA25A	0.500	25	N/A	85mm WC Al Helix	WCL16
XW127EA25B	0.650	25	8	85mm WC Al with Busbar Helix	WCL17
XW160FC25A	3.620	25	N/A	100mm WC Cu	WCL6
XW160FC25B	4.520	25	10	100mm WC Cu with Busbar	WCL7
XW180GC34A	4.920	34	N/A	125mm WC Cu Helix	WCL11
XW180GC34B	5.950	34	10	125mm WC Cu with Busbar Helix	WCL10
XW180GA34A	1.500	34	N/A	125mm WC Al Helix	WCL11
XW180GA34B	1.800	34	10	125mm WC Al with Busbar Helix	WCL10
XW180GN25A	0.920	25	N/A	125mm WC Al Nitride Helix	WCL18
XW270QA25A	2.941	25	N/A	270 x 190mm WC Al Cold Plate	WCL9



WCL2



WCL4

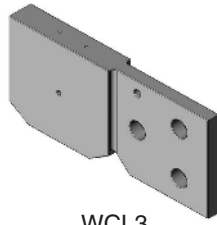


WCL8

Outlines on pages O-01...O-30



WCL1



WCL3



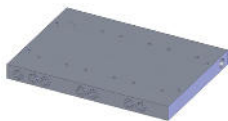
WCL5



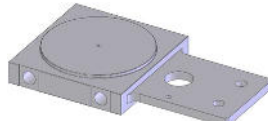
WCL6



WCL7



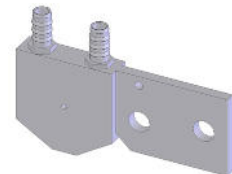
WCL9 -WS65



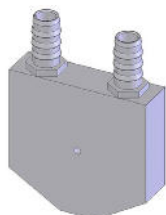
WCL10



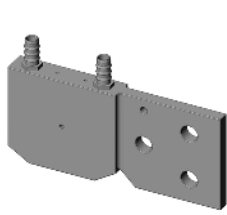
WCL11



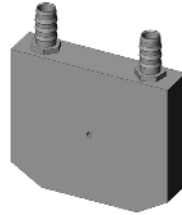
WCL12 -WS71-1



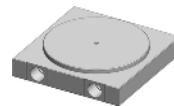
WCL13 -WS71-2



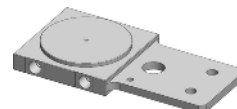
WCL14 -WS72-1



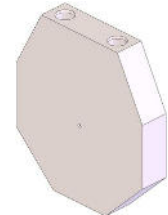
WCL15 -WS72-2



WCL16



WCL17



WCL18

Part No.	Cooler Accessories
XSNM12H10S	M12 Cooler Connection. 10mm Hose & Stainless Steel material
XSNM12H12S	M12 Cooler Connection. 12mm Hose & Stainless Steel material
XSNM10H15P	M10 Cooler Connection. 15mm Hose & Plastic Material

Snubber Capacitors - New Range

A new addition for 2013. IXYS UK's new range of snubber capacitors. These capacitors have a low series resistance, high pulse strength and low self-inductance of 15nH; they also have very good self-healing characteristics without loss of capacitance. These capacitors consist of a flame retardant plastic can filled with solid resin to ensure reliable operation even under the most extreme environmental conditions.

Part No.	Capacitance	Series Resistance	RMS Current	Peak Current	Peak Surge Current	DC Voltage	AC Voltage	Non-repetitive Surge voltage	Fig.	Dia-meter D1	Length L1
	CN	ESR	I_{RMS}	I_{PK}	I_S	V_{DC}	V_{AC}	V_S			
	μF	m Ω	A	kA	kA	V	V	V		mm	mm
E53.H59-471T1W	0.47	2.90	20	0.70	2.10	3750	2100	5625	T1	55	59
E53.H59-102T1W	1.00	1.60	40	0.35	1.75	3200	1050	4800	T1	55	59
E53.H59-152T1W	1.50	2.40	32	0.27	1.35	2800	700	4200	T1	55	59
E53.H59-252T1W	2.50	1.80	40	0.37	1.10	2250	700	3375	T1	55	59
E53.M59-252T2W	2.50	0.65	75	0.90	4.50	3200	1050	4800	T2	75	59
E53.R11-302T21W	3.00	1.20	125	2.10	6.30	5000	2100	7500	T1	115	110
E53.H59-332T1W	3.30	1.60	40	0.42	1.20	2000	700	3000	T1	55	59
E53.M59-332T2W	3.30	1.10	60	0.60	3.00	2800	700	4200	T2	75	59
E53.P59-402T2W	4.00	0.50	80	1.50	7.50	3200	1050	4800	T2	95	59
E53.R11-402T2W	4.00	1.00	125	2.50	7.50	5000	2100	7500	T2	115	110
E53.H59-472T1W	4.70	1.10	45	0.50	1.60	1700	700	2550	T1	55	59
E53.Q59-502T2W	5.00	0.32	100	1.80	9.00	3200	1050	4800	T2	105	59
E53.M59-602T2W	6.00	0.75	70	0.88	2.60	2250	700	3375	T2	75	59
E53.Q59-602T2W	6.00	0.28	100	2.20	11.00	3200	1050	4800	T2	105	59
E53.P59-682T2W	6.80	0.55	80	1.20	6.00	2800	700	4200	T2	95	59
E53.R60-702T2W	7.00	0.25	100	3.00	12.00	3200	1050	4800	T2	115	60
E53.P59-752T2W	7.50	0.50	80	1.50	7.50	2800	700	4200	T2	95	59
E53.H59-802T1W	8.00	1.70	38	0.33	1.00	1400	350	2100	T1	55	59
E53.M59-802T2W	8.00	0.65	80	1.00	3.00	2000	700	3000	T2	75	59
E53.Q59-802T2W	8.00	0.45	100	1.50	7.50	2800	700	4200	T2	105	59
E53.M59-103T2W	10.00	0.52	80	1.10	3.50	1700	700	2550	T2	75	59
E53.P59-103T2W	10.00	0.46	80	1.50	4.50	2250	700	3375	T2	95	59
E53.Q59-103T2W	10.00	0.35	100	1.80	9.00	2800	700	4200	T2	105	59
E53.H59-123T1W	12.00	1.70	40	0.40	1.20	1100	350	1650	T1	55	59
E53.R60-123T2W	12.00	0.29	100	2.20	12.00	2800	700	4200	T2	115	60
E53.P59-143T2W	14.00	0.35	80	1.80	5.50	2000	700	3000	T2	95	59
E53.Q59-143T2W	14.00	0.33	100	2.00	6.00	2250	700	3375	T2	105	59
E53.H59-153T1W	15.00	1.10	40	0.50	1.50	1100	350	1650	T1	55	59
E53.Q59-153T2W	15.00	0.27	100	2.10	6.20	2250	700	3375	T2	105	59
E53.M59-163T2W	16.00	0.85	60	0.65	1.35	1400	350	2100	T2	75	59
E53.P59-163T2W	16.00	0.37	80	1.80	5.50	1700	700	2550	T2	95	59
E53.Q59-183T2W	18.00	0.26	100	2.30	6.90	2000	700	3000	T2	105	59
E53.R60-183T2W	18.00	0.25	100	2.60	10.00	2250	700	3375	T2	115	60
E53.Q59-223T2W	22.00	0.27	100	2.50	7.50	1700	700	2550	T2	105	59
E53.R60-243T2W	24.00	0.21	100	3.00	10.00	2000	700	3000	T2	115	60
E53.M59-253T2W	25.00	0.71	70	0.83	2.50	1100	350	1650	T2	75	59
E53.H59-303T1W	30.00	0.85	60	0.68	2.10	900	350	1350	T1	55	59
E53.N51-303H1W	30.00	1.30	60	1.30	3.90	1600	-	2400	H1	85	51
E53.P59-303T2W	30.00	0.46	80	1.20	3.70	1400	350	2100	T2	95	59
E53.H59-333T1W	33.00	0.95	55	0.68	2.10	700	350	1050	T1	55	59
E53.R60-333T2W	33.00	0.18	100	3.50	10.00	1700	700	2550	T2	115	60
E53.N51-383H1W	37.50	1.20	60	1.40	4.00	1400	-	2100	H1	85	51
E53.N68-403H1W	40.00	1.60	60	1.30	3.90	1600	-	2400	H1	85	68
E53.Q59-403T2W	40.00	0.34	100	1.70	5.10	1400	350	2100	T2	105	59
E53.H59-503T1W	50.00	0.80	60	0.83	2.50	550	280	825	T1	55	59
E53.N51-503H1W	50.00	1.10	70	1.60	4.80	1200	-	1800	H1	85	51
E53.N68-503H1W	50.00	1.50	60	1.40	4.20	1400	-	2100	H1	85	68
E53.P59-503T2W	50.00	0.34	80	1.70	5.00	1100	350	1650	T2	95	59
E53.R60-503T2W	50.00	0.27	100	2.20	10.00	1400	350	2100	T2	115	60

H1



T1/T2



NEW - DC Link Capacitors

The E50 PK16 capacitor can be universally used for the assembly of low inductance DC buffer circuits and DC filters; with its high energy density it can replace banks of series-connected electrolytic capacitors as well as large film capacitors in rectangular cases. The capacitance in a DC buffer circuit must be sufficiently sized to both handle and smoothen the occurring ripple currents. The traditional use of series/parallel-connected electrolytic capacitors offered large capacitance at seeming low cost. However the low cost per microfarad is countered by very low current strength, the high sensitivity to voltage and current surges, as well as high risk of field failures resulting in high maintenance cost. Advanced know-how in special capacitor film coating and many years of practical experience in designing and manufacturing capacitors have allowed the design of the E50 PK16 range with high current density. With fivefold the current strength of conventional electrolytic capacitors, it is not necessary to reproduce the same capacitance in film technology. Instead, the user now gets a superior technical solution within the same – or even less – space offering:

- Superior voltage and current strength
- Dramatic increase in operational life
- Drastic reduction of failures
- Minimisation of power dissipation losses
- Substantial reduction of self-inductance and series resistance
- More exact manufacturing tolerances
- Elimination of sharing resistors

Thanks to its compact cylindrical aluminium (NT) or plastic (N4) can design these capacitors are ideal for both electrical and mechanical requirements of high-speed IGBT converters. Its robust terminals and the robust fixing stud allow for very simple and reliable mounting that unites lowest inductance and highest current strength. The particularly large creepage and clearance distances make this design suitable for a wide range of operating voltages. As a result, existing standard converter concepts can easily be adapted to new applications without having to change the principal construction and to re-approve the entire system. The capacitors listed below have been designed specifically to match the requirements of IXYS UK's press-pack IGBT range in most inverter/converter applications.

Part No.	V_{DC}	Capacitance μF	Series Resistance R_S Ω	Maximum Current I_{MAX} A	Inductance L_E nH	Diameter mm	Length mm	Design
	V							
E50.N15-254N5W	1300	250	4.2	60	40	85	155	N5
E50.N15-304NTW	1300	300	3.7	60	40	85	155	NT
E50.R16-554NTW	1300	545	2.3	80	40	116	165	NT
E50.N25-564NTW	1300	560	2.3	60	60	85	252	NT
E50.R23-824NTW	1300	820	1.7	100	50	116	230	NT
E50.R29-115NTW	1300	1090	1.4	100	60	116	295	NT
E50.R34-145NTW	1300	1370	1.1	100	70	116	345	NT
E50.S29-165NTW	1300	1560	1.1	120	70	136	295	NT
E50.S34-205NTW	1300	1950	0.69	120	70	136	345	NT
E50.N15-603NTW	2800	60	1.3	50	40	85	155	NT
E50.N23-104NTW	2800	100	1.7	60	60	85	232	NT
E50.R16-114NTW	2800	110	0.66	80	40	116	165	NT
E50.R23-174NTW	2800	165	0.63	100	50	116	230	NT
E50.R29-224NTW	2800	220	0.62	100	60	116	295	NT
E50.R34-284NTW	2800	275	0.85	100	70	116	345	NT
E50.S29-314NTW	2800	310	0.61	120	70	136	295	NT
E50.S34-394NTW	2800	390	0.76	120	70	136	345	NT
E50.N15-293NTW	3600	29	1.4	50	40	85	155	NT
E50.N23-503NTW	3600	50	1.9	60	60	85	232	NT
E50.R16-573NTW	3600	57	0.67	80	40	116	165	NT
E50.R23-863NTW	3600	85.5	0.65	100	50	116	230	NT
E50.R29-114NTW	3600	114	0.68	100	60	116	295	NT
E50.R34-144NTW	3600	142	0.88	100	70	116	345	NT
E50.S29-164NTW	3600	160	0.63	120	70	136	295	NT

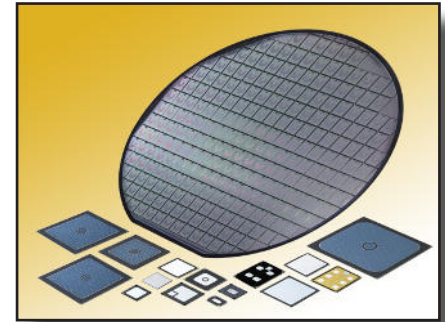
Other voltage/capacitor ratings are available on request. Please contact IXYS UK for more information



Power Semiconductor Chips

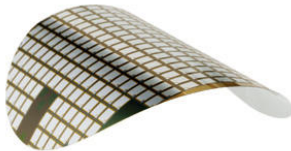
IXYS offers a wide range of power semiconductor dies for a multitude of applications.

Bipolar Chips	V_{RRM} / V_{DRM} V	$I_{F(AV)M} / I_{T(AV)M}$ A	t_{rr} ns
Schottky Diodes	8 - 200	5 - 300	-
HiPerFRED™ (Low Leakage)	200 - 1200	10 - 150	30 - 40
Sonic™ Fast Recovery Diodes	600 - 1800	5 - 150	30 - 60
FRED™ (Low Forward Voltage Drop)	200 - 1200	10 - 150	40 - 60
Semi-Fast Diodes	1200 - 1600	15 - 60	60 - 100
Rectifier Diodes	1200 - 2200	10 - 400	-
Phase Control Thyristors	800 - 2200	5 - 300	-
IGBT Chips	V_{CES} V	I_C A	Speed
XPT IGBT	650	6 - 300	medium / fast
XPT IGBT	900	20 - 300	fast
XPT IGBT	1200	3 - 200	medium
XPT IGBT	1700	75 - 200	medium
HV XPT IGBT	3300 / 4500	40 - 60	medium



Mode of Shipment:

- in wafer form, unsawn, electrically tested, rejects are inked
- sawn wafer on foil, electrically tested, rejects are inked
- known good die in tray (Waffle Pack)
- customized die sizes / geometry on request



XPT Features:

- thin wafer technology
- low $V_{ce(sat)}$ and E_{off}
- very low gate charge
- rugged, square RBSOA @ $3 \times I_{nom}$
- short circuit rated (10 μ s)
- easy to parallel

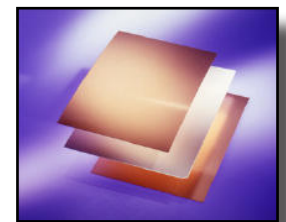
For chip sales please contact:
chipsales@ixys.de

Direct Copper Bonded Ceramic Substrates

DCB Ceramic Substrates (Al₂O₃)

IXYS manufactures Direct Copper Bonded substrates on aluminum oxide (Al₂O₃) base. DCB ceramic substrates form the basis for new product ideas and electronic developments with a high degree of integration.

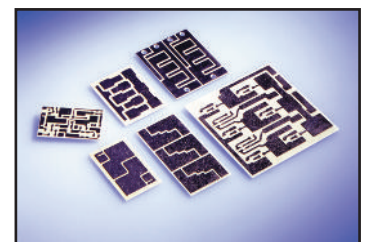
- carriers for semiconductor chips and connection clips
- circuits similar to that on a PC board
- electrical isolator for separating „current paths“ from „heat paths“
- transfer medium for heat dissipation from active parts into heat sink



Standard bonded DCB panel dimensions are:

Unclad aluminum oxide ceramic			
Al ₂ O ₃ content		> 96	%
dimensions		138x210, 138x190.5, 115x165*	mm
usable area	max.	130x200, 130x180, 107x156*	mm
thickness		1.00, 0.63, 0.38, 0.25	mm
arc through voltage		10	kV
thermal conductivity		> 24	W/m · K
Conduction layers - both sides			
copper thickness		0.3 (< 0.3 on request)	mm
conductor width	min.	0.3 +/- 0.2	mm
conductor spacing	min.	0.4 +/- 0.2	mm
spacing conductor/edge of ceramic	min.	0.35 +/- 0.2	mm
surface finishes available		bare copper; nickel plated; nickel + gold plated	
peel-off resistance (90° peel test)		>6	N/mm
DCB ceramic substrate			
application temperature range		-55...+850	°C
resistant to hydrogen	max.	400	°C
thermal expansion coefficient	to typ.	7.4 x 10 ⁻⁶	K ⁻¹

- DCB parts are available as:
- bonded plate
 - bonded and patterned plate
 - prelasered, unbroken plate
 - individuale substrates
 - customer specific substrates on request



* = (for 0.25 mm thk.)

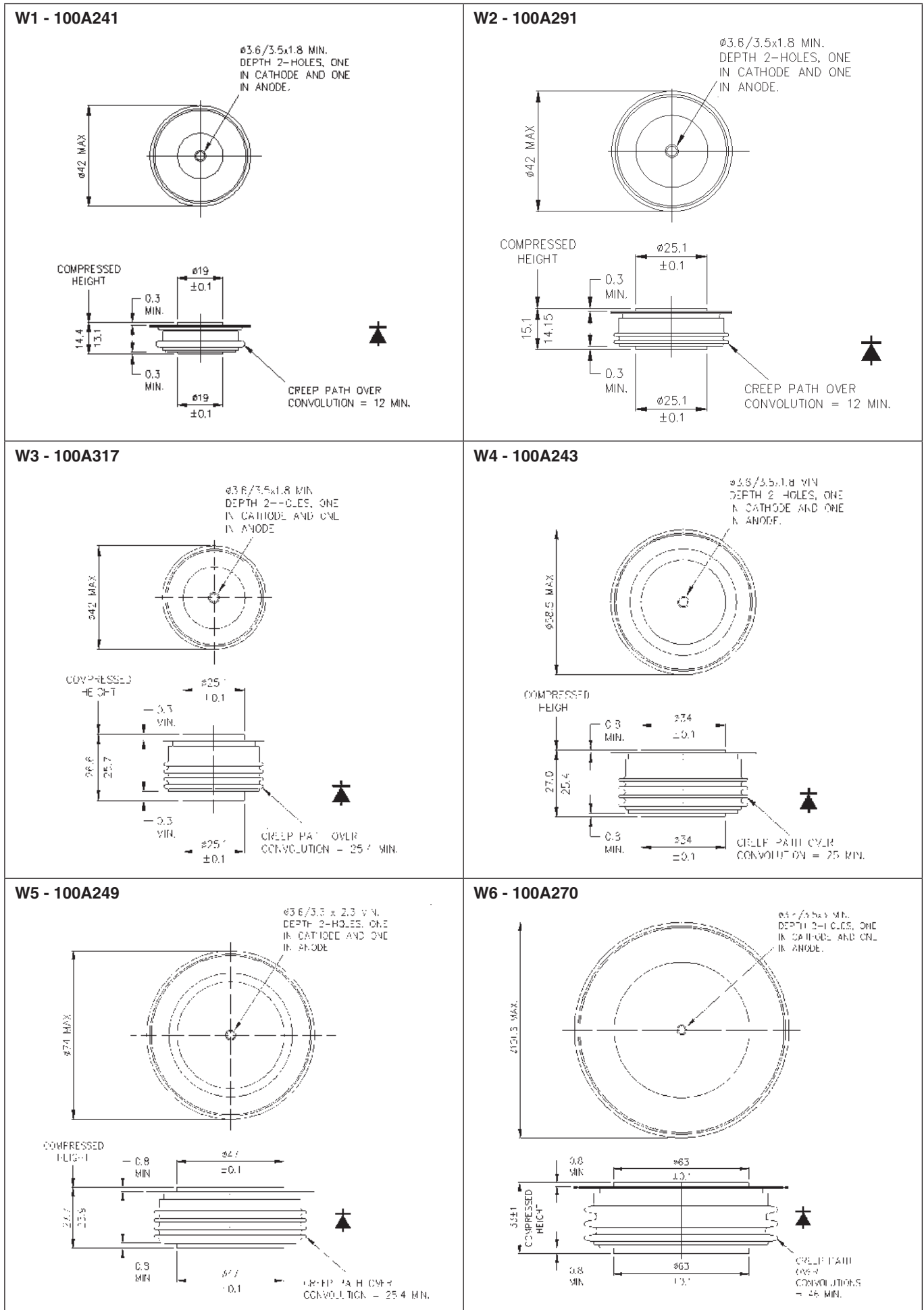
Application Notes Highlights

further information and downloads see www.ixys.com

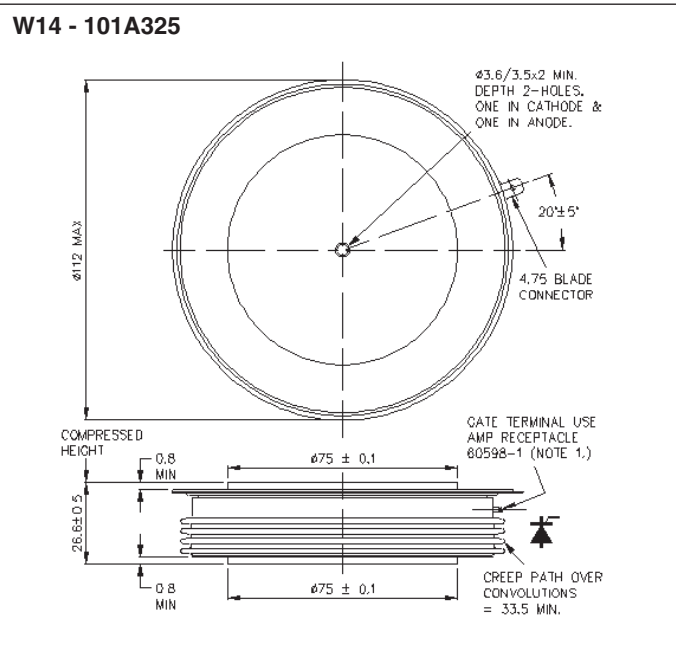
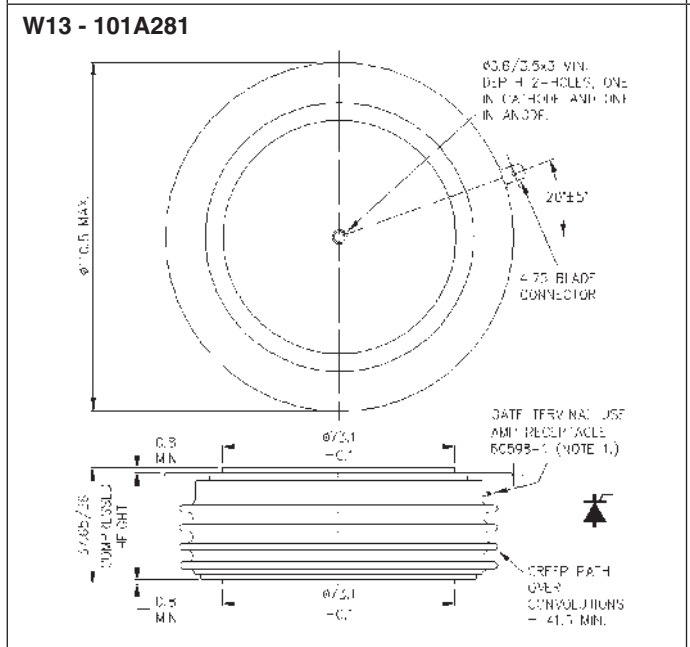
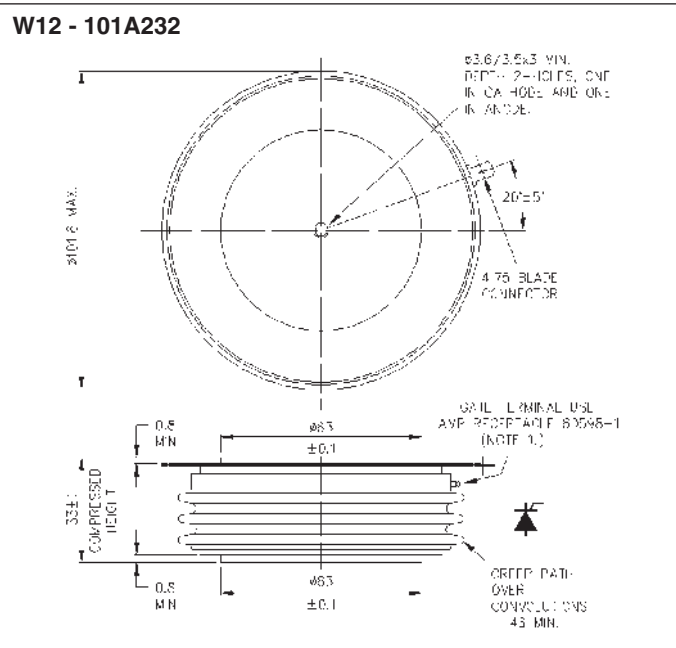
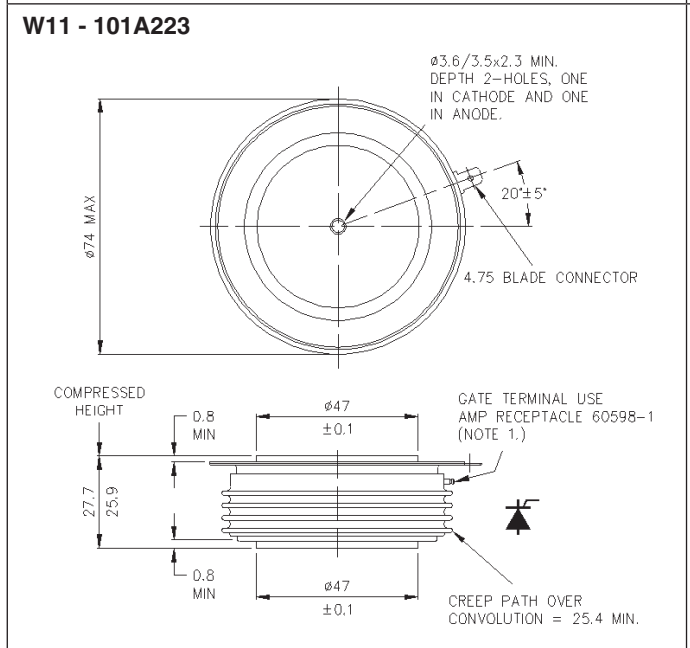
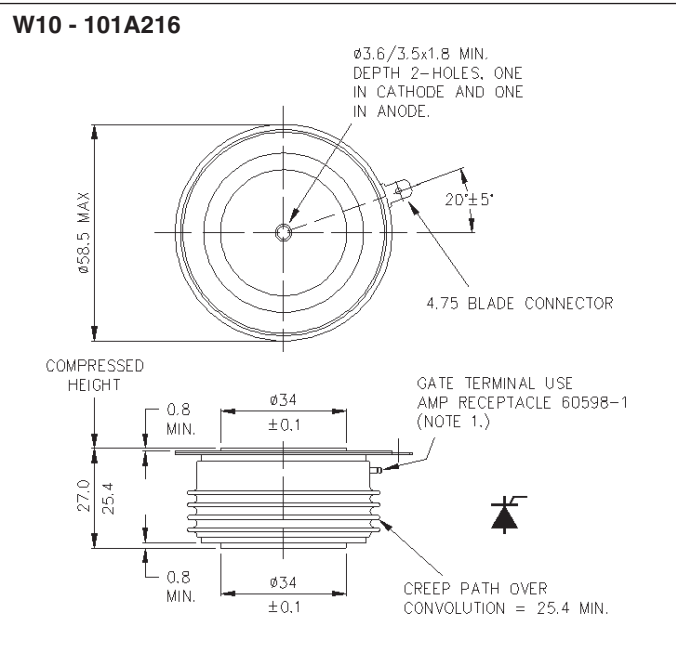
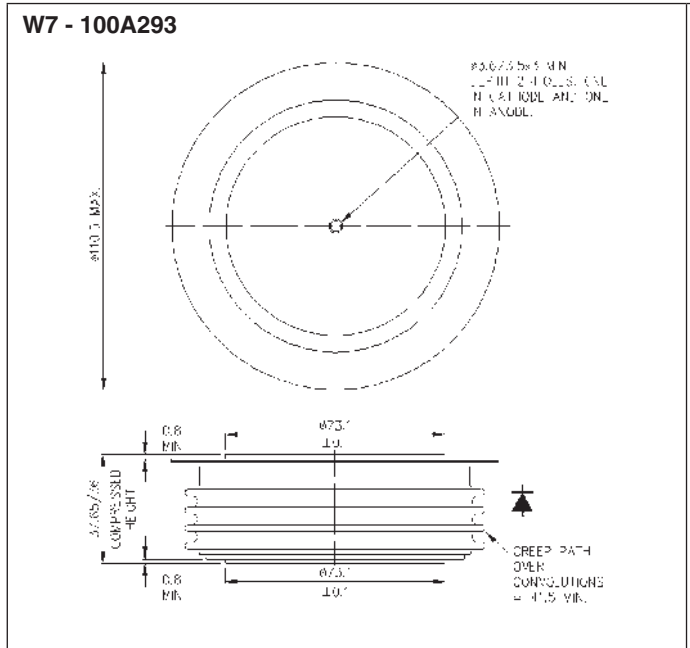
Power Factor Correction	
IXAN0001	3-Phase PFC using Vienna Rectifier Approach and Modular Construction for Improved Overall Performance, Efficiency and Reliability
IXAN0002	Single and Three-Phase Rectifiers with Active Power Factor Correction for Enhanced Mains Power Quality
IXAN0003	Rectifiers with Power Factor Correction
IXAN0004	Design and Experimental Investigation of a Three-Phase, High Power Density, High Efficiency, Unity Power Factor PWM (VIENNA) Rectifier Employing a Novel Integrated Power Semiconductor Module
IXAN0005	Status of the Techniques of Three-Phase Rectifier Systems with Low Effects on the Mains
MOSFETs and IGBTs Drivers	
IXAN0012	MOSFET/IGBT Drivers - Theory and Applications
IXAN0011	Driving Your MOSFETs Wild to Obtain Greater Efficiencies, Power Densities and Lower Overall Cost
BiMOSFETs Applications	
IXAN0013	Capacitor Charge/Discharge Circuits, utilizing High Voltage IGBTs and ZCS Resonant Mode Techniques
IXAN0014	Comparative Performance of BiMOSFETs in Fly-back Converter Circuits
IXAN0015	Use of BiMOSFETs in Modern Radar Transmitters
IXAN0016	IXBH40N160 BiMOSFET Developed for High Voltage and High Frequency Applications
IXAN0017	New 1600V BiMOSFET Transistors Open Up New Applications
Automotive Applications	
IXAN0018	A High Current Dual Inline Packaged Trench MOSFET Three Phase Full Bridge as Contribution to Automotive System Integration
IXAN0019	High Power TrenchMOSFETs Solutions in Automotive Designs
IXAN0020	Power Electronic Supply for Automotive Starter Generator
IXAN0021	New Trench Power MOSFETs in Isolated Packages
Isolation Techniques, Mounting, Soldering and Cooling	
IXAN0071	The SMPD Package and its Mounting Instructions
IXAN0022	Capitalizing on the Advantages of ISOPLUS Products
IXAN0023	General Mounting Instructions
IXAN0025	ISOPLUS-The Revolution in Discrete Isolation Technique
IXAN0026	Combining the Features of Modules and Discretes in a New Power Semiconductor Packages
IXAN0028	The Revolution in Discrete Isolation Technique
IXAN0030	Surface Mount Soldering Recommendations for TO-263 and TO-268 case styles
IXAN0031	New ISOPLU247 Power Package Features 2500V Internal Isolation Revolutionary Approach Improves Thermal Conductance and Reliability
Power Modules	
IXAN0034	Recommended Use of the Integrated NTC Thermistor Temperature Sensor in IXYS Power Modules
IXAN0035	Mounting Instructions for _A7, _E7, _A8 and _E8 Module Series
IXAN0036	Investigations on Electromagnetic Compatibility of Power Semiconductor Modules Integrated in a Module
IXAN0037	Power Cycle Capability of solder contact DCB-Modules
FREDs and Schottky Diodes	
IXAN0042	Is the Lowest Forward Voltage Drop Schottky Diode Always the Best Choice?
IXAN0043	Input Rectifiers with Semifast Diodes for DC link.
IXAN0044	Characteristics and Applications of Fast Recovery Epitaxial Diodes.
IXAN0060	Optimized Ultra Fast Diodes for Switching Applications
Power MOSFETs	
IXAN0057	Series Operation of MOSFET and IGBT Switches
IXAN0061	Power MOSFET Basics
IXAN0062	IXYS Power MOSFET Products
IXAN0063	Application note on Depletion-mode
IXAN0064	IXYS P-Channel MOSFET
IXAN0065	IXYS Power MOSFET Datasheet Parameters Definition
IXAN0068	Linear Power MOSFETS Basic and Application
IXAN0069	Synchronous DC to DC Converter Design
IGBTs	
IXAN0063	IGBTs
IXAN0070	Drive with the IXYS XPT IGBT
IXAN0072	Discrete 600V GenX3 XPT IGBTs

Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

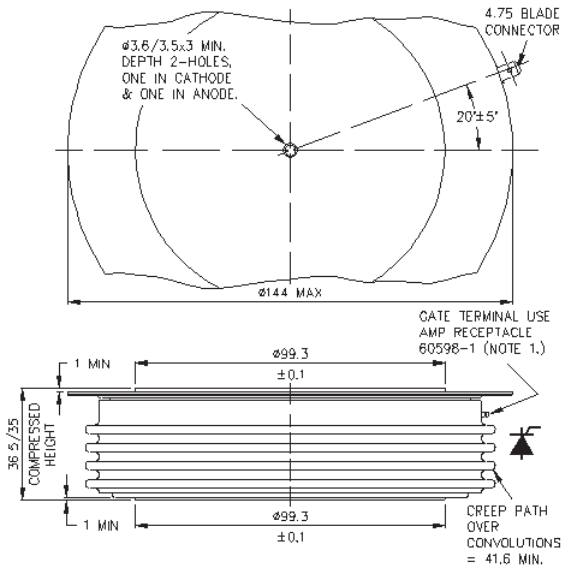


Dimensions in mm and inches (1 mm = 0.0394")

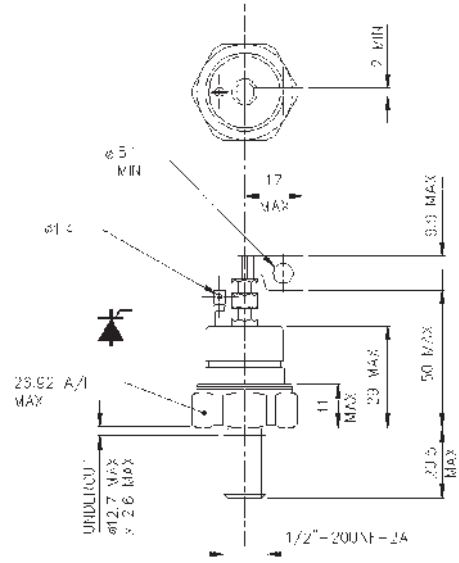


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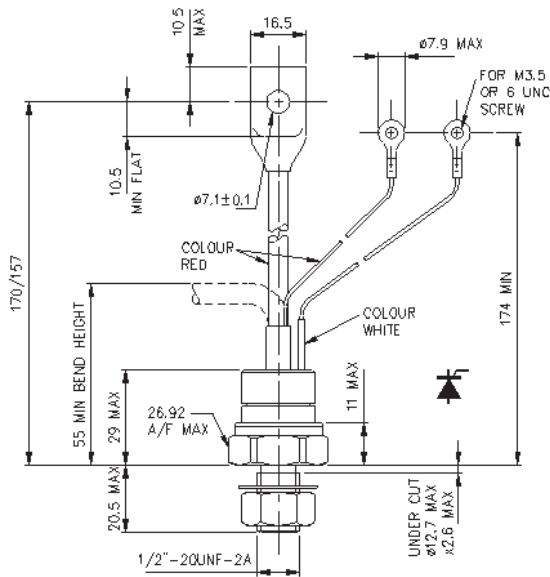
W15 - 101A322



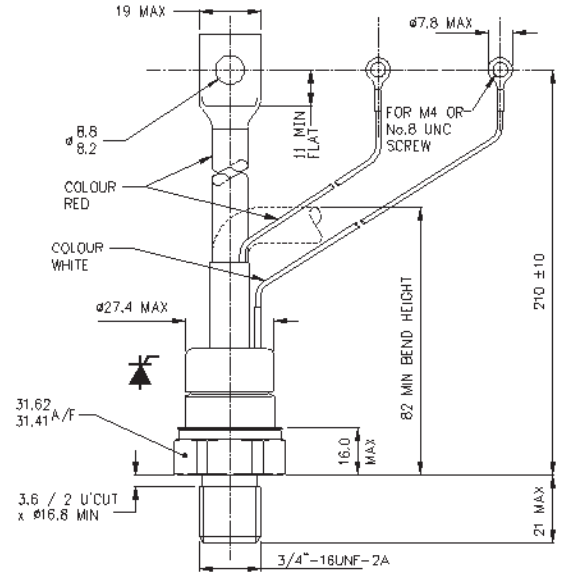
W16 - 101A235



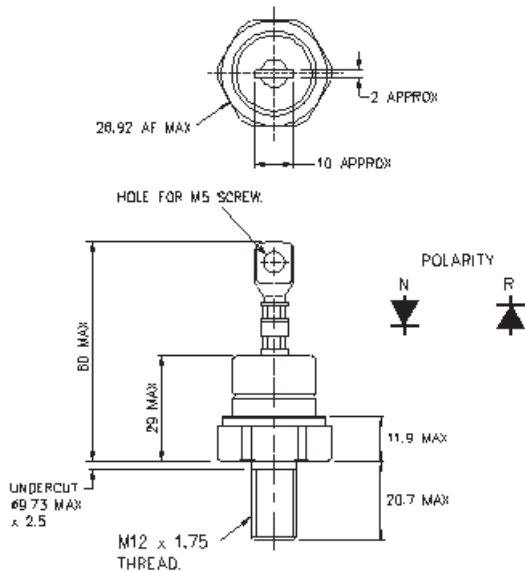
W17 - 101A231



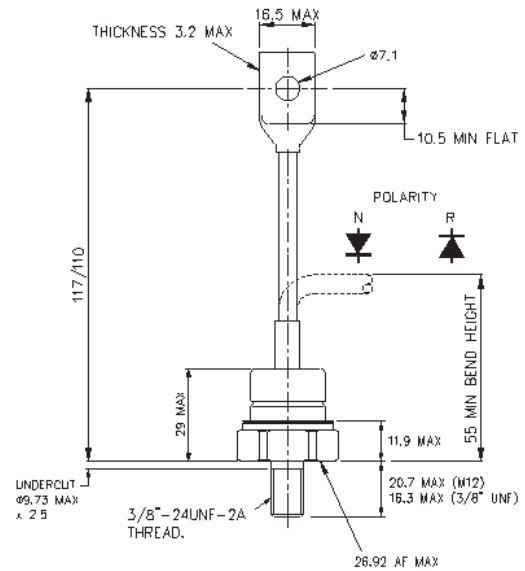
W18 - 101A225



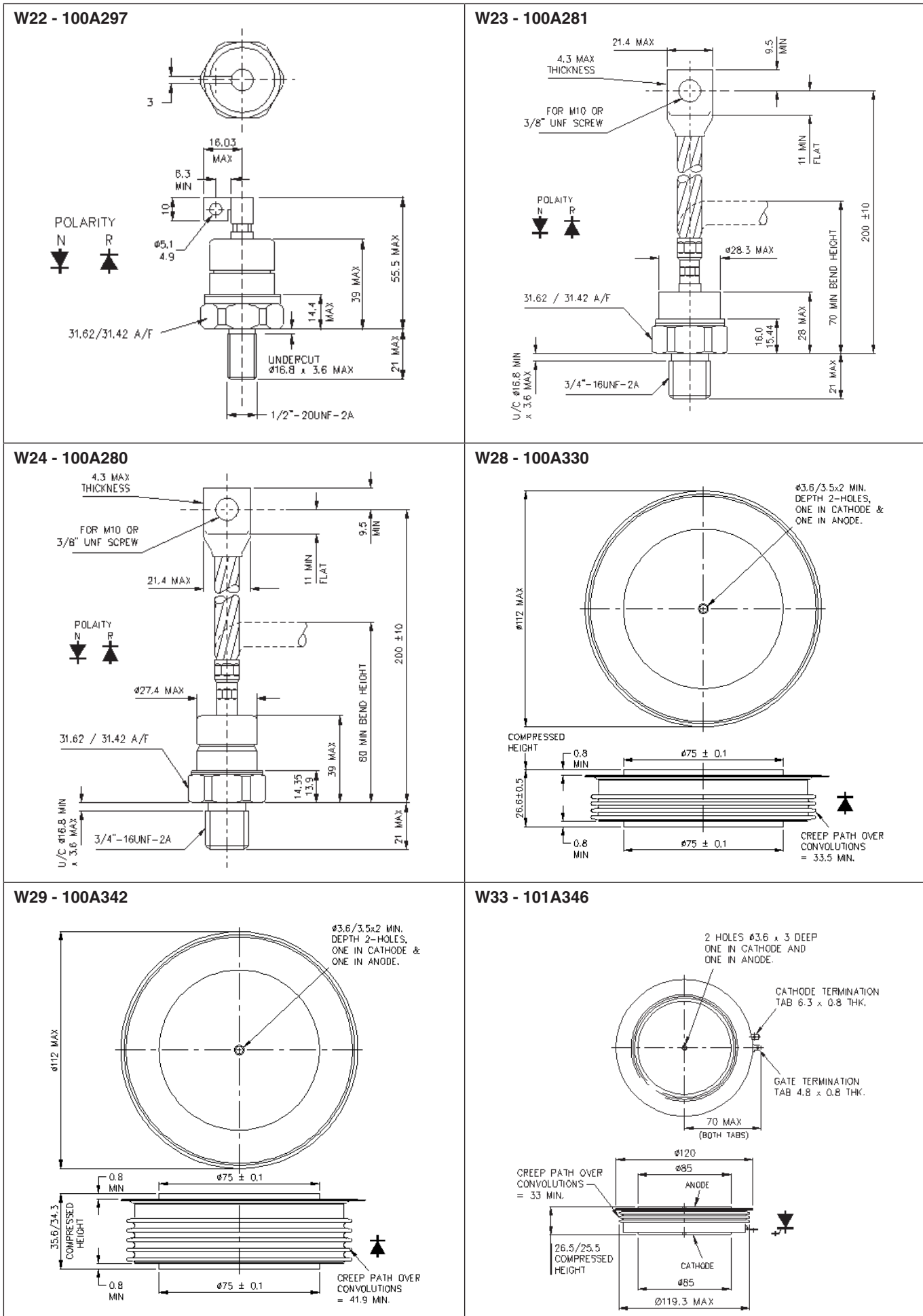
W20 - 100A303



W21 - 100A294

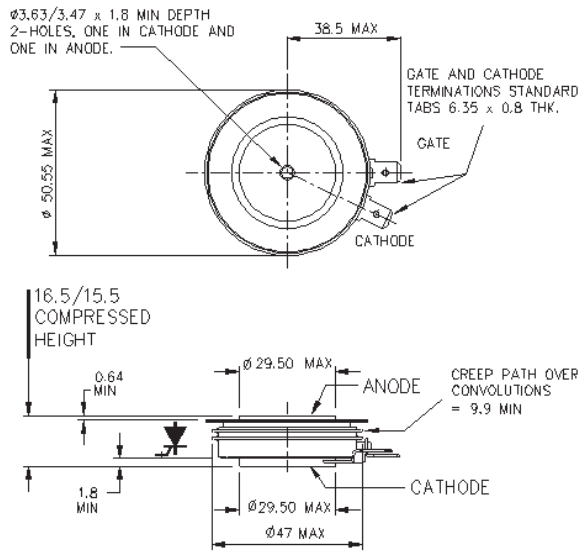


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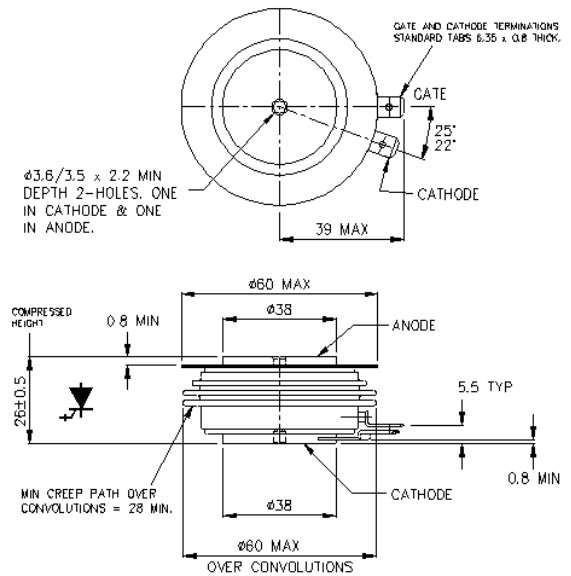


Dimensions in mm and inches (1 mm = 0.0394")

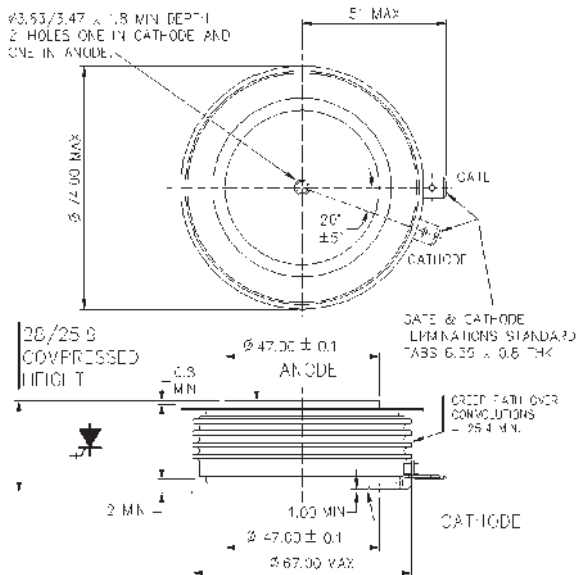
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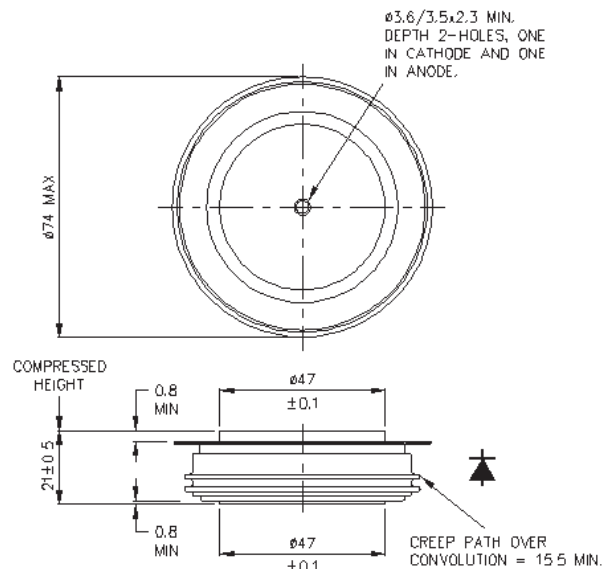
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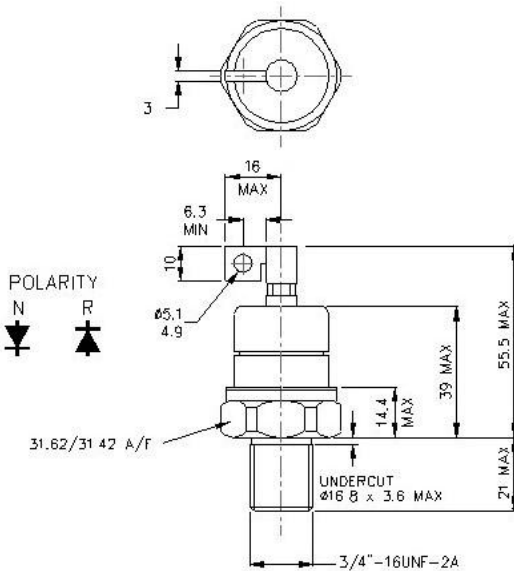
W36 - 101A288



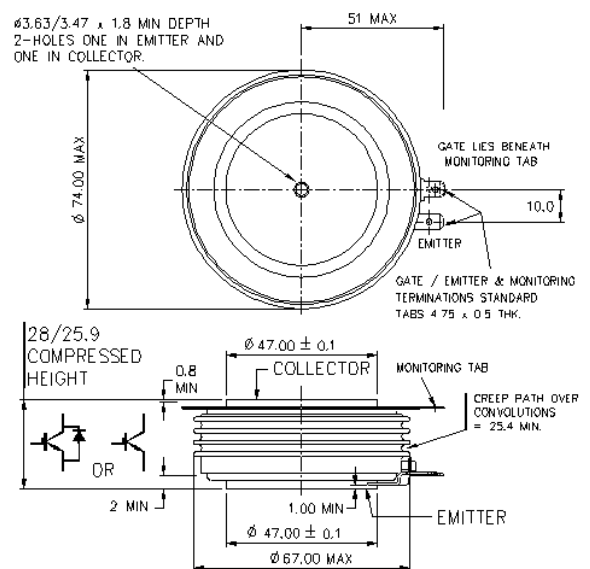
W37 - 100A325



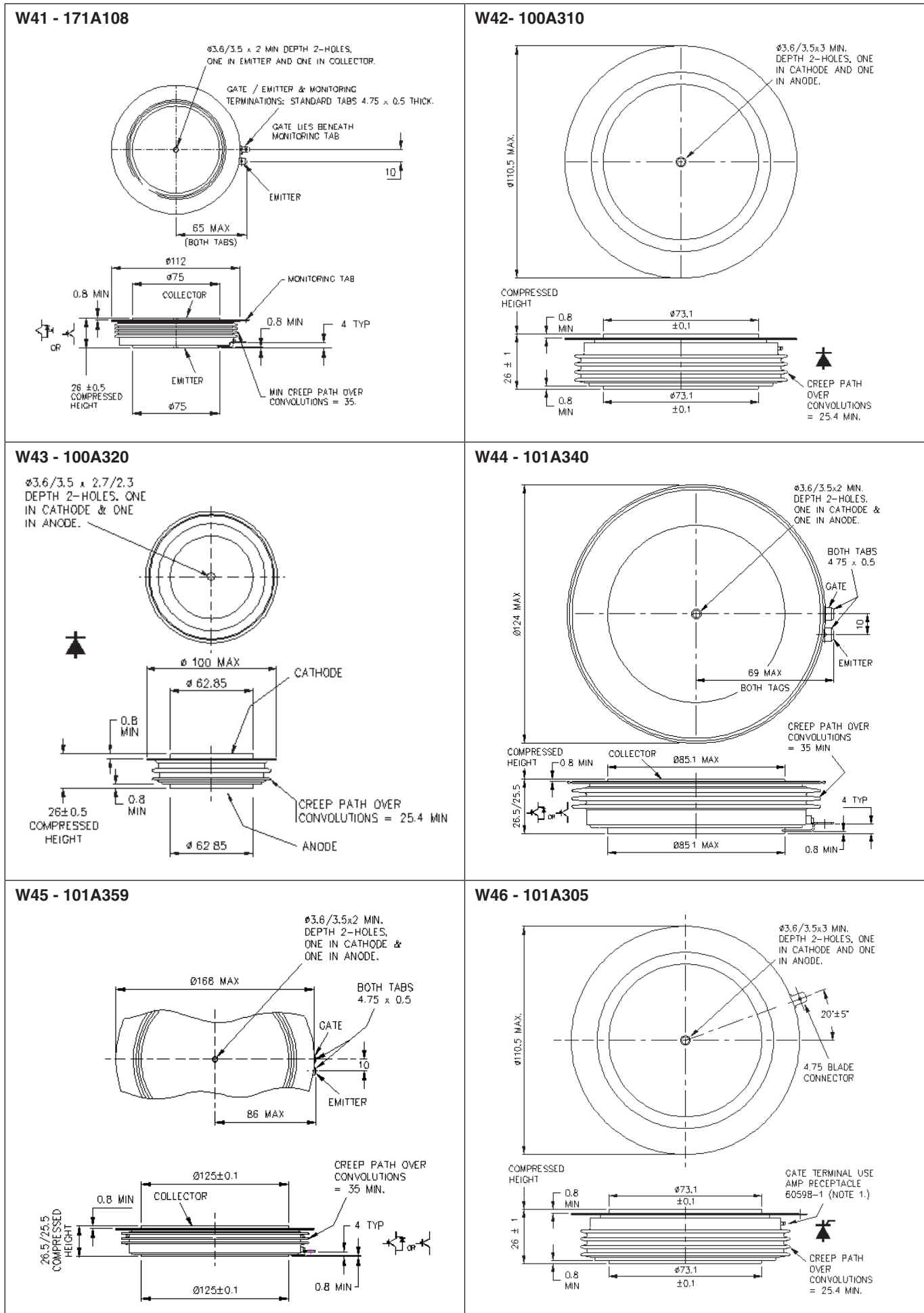
W39 - 100A338



W40 - 171A107



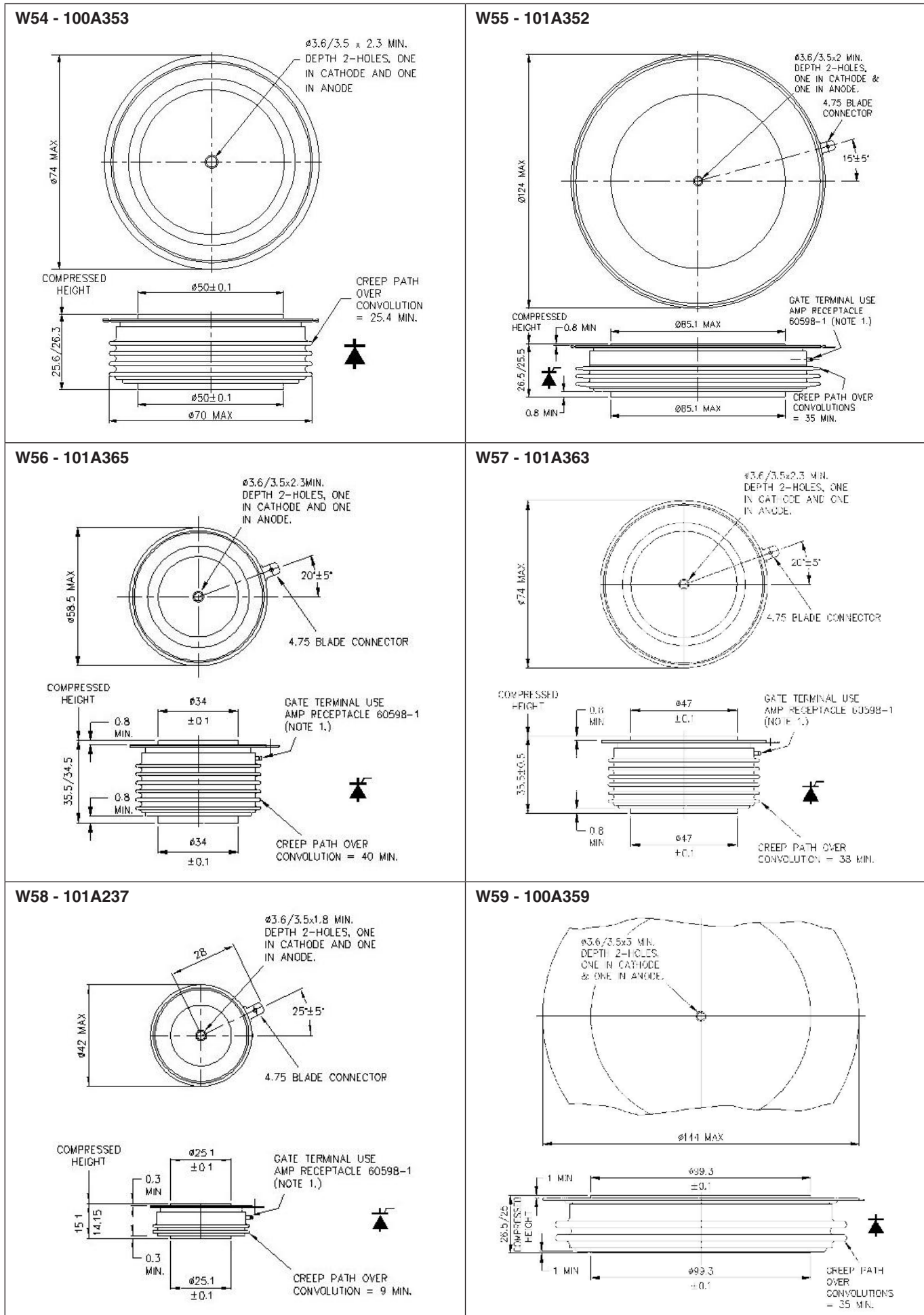
Dimensions in mm and inches (1 mm = 0.0394")



Dimensions in mm and inches (1 mm = 0.0394")

<p>W46x</p> <p>WC46*</p> <p>Device outline W46 is available with a slightly reduced height of 25 mm.</p> <p>At the time of going to press, this option only applies to two Phase Control Thyristors: N3880ZD160-180 and N6012ZD020-060.</p> <p>Please refer to Chippenham Factory.</p>	<p>W47 - 100A322</p> <p>Technical drawing showing top and side views of the W47 - 100A322 thyristor. The top view shows a circular component with an outer diameter of 74 MAX and two holes of diameter 3.6/3.5 x 2.3 MIN. The side view shows a compressed height of 14 ± 0.5, a diameter of 47 ± 0.1, and a 0.8 MIN gap. The creep path over convolution is 17 MIN.</p>
<p>W48 - 101A347</p> <p>Technical drawing showing top and side views of the W48 - 101A347 thyristor. The top view shows a circular component with an outer diameter of 150 MAX and two holes of diameter 2.7/2.3 x 3 MIN. The side view shows a compressed height of 26 ± 0.5, a diameter of 100 ± 0.1, and a 0.4 MIN gap. The creep path over convolution is 36 MIN.</p>	<p>W49 100A354</p> <p>Technical drawing showing top and side views of the W49 100A354 thyristor. The top view shows a circular component with an outer diameter of 62 MAX and two center holes of diameter 3.5 x 1.5 DEEP. The side view shows a compressed height of 8 ± 0.25, a diameter of 44.40 ± 0.1, and a creep distance over ceramic of 4mm.</p>
<p>W51 - 101A334</p> <p>Technical drawing showing top and side views of the W51 - 101A334 thyristor. The top view shows a circular component with an outer diameter of 112 MAX and two holes of diameter 3.6/3.5 x 2 MIN. The side view shows a compressed height of 35 ± 0.5, a diameter of 75 ± 0.1, and a 0.8 MIN gap. The creep path over convolution is 41.9 MIN.</p>	<p>W52 - 100A328</p> <p>Technical drawing showing top and side views of the W52 - 100A328 thyristor. The top view shows a circular component with an outer diameter of 144 MAX and two holes of diameter 3.6/3.5 x 3 MIN. The side view shows a compressed height of 36.5/35, a diameter of 99.3 ± 0.1, and a 1 MIN gap. The creep path over convolution is 41.6 MIN.</p>

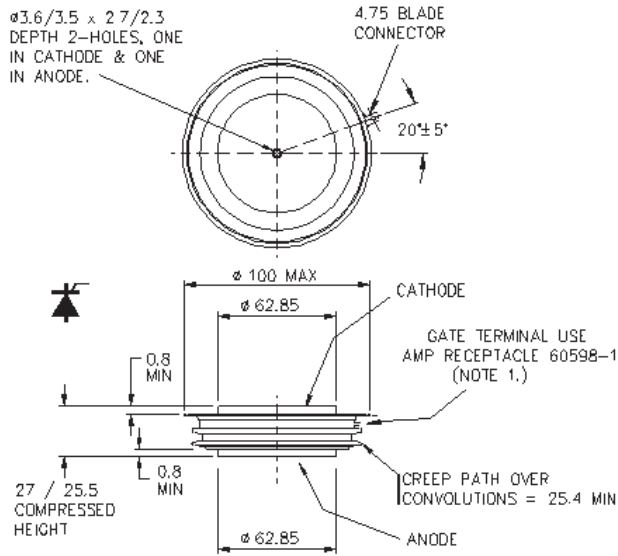
Dimensions in mm and inches (1 mm = 0.0394")



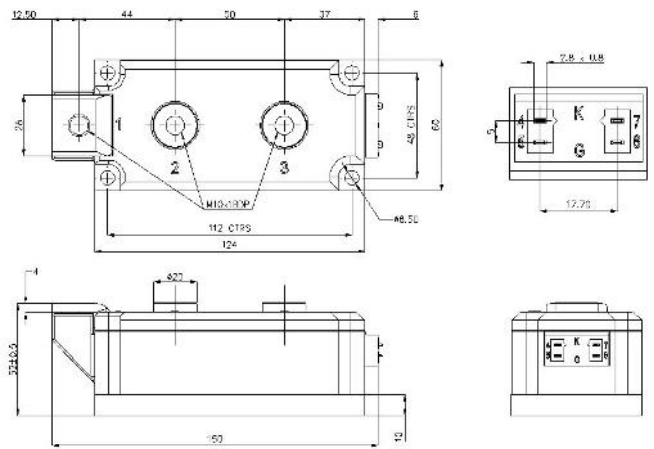
Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

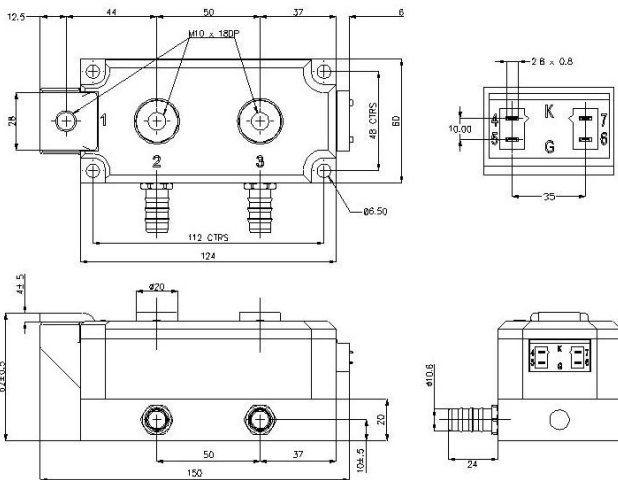
W62 - 101A314



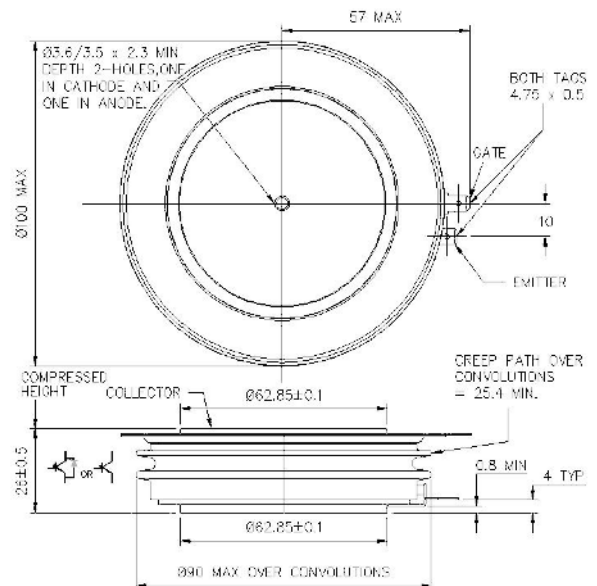
W63 - 150A111



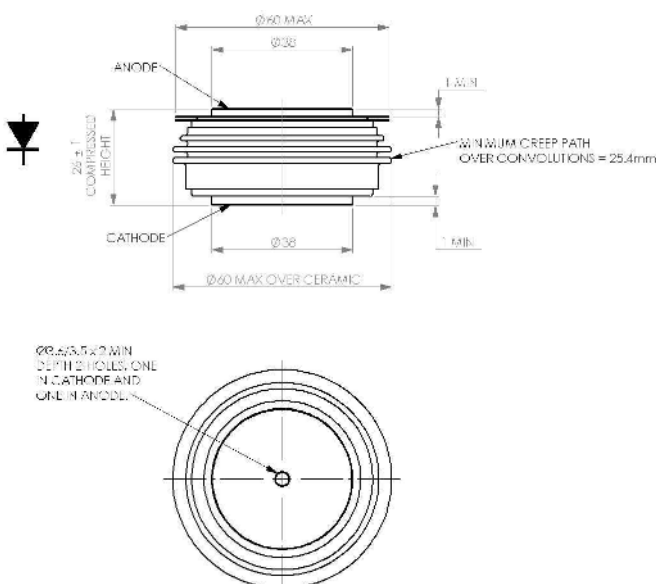
W64 - 150A113



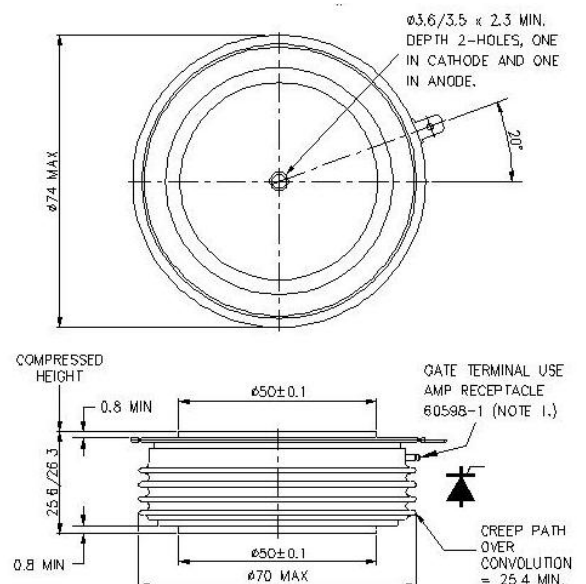
W67 - 101A366



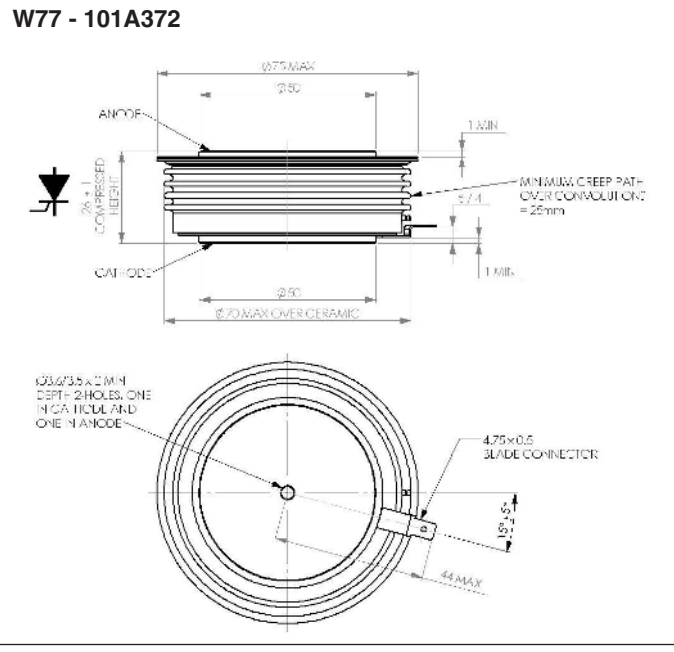
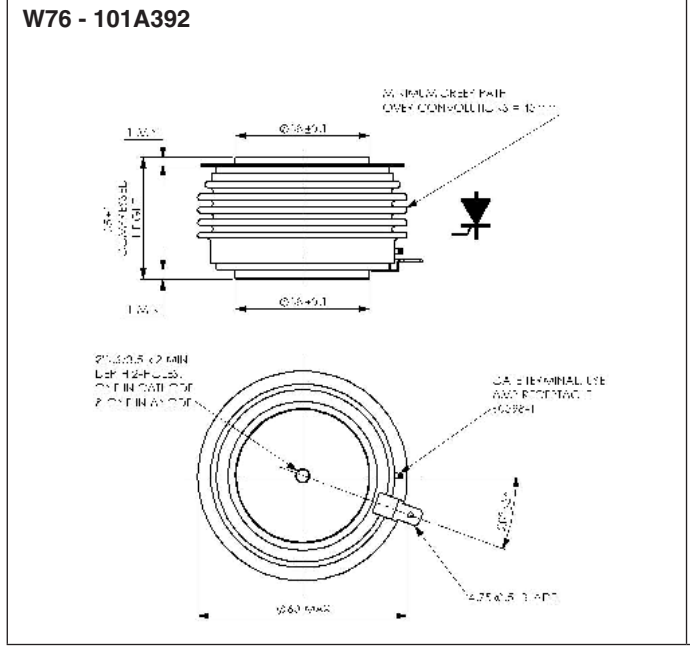
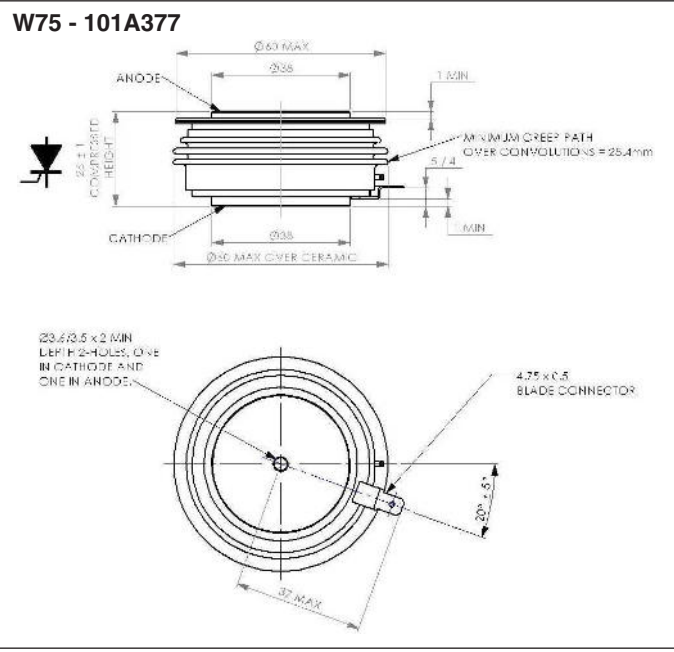
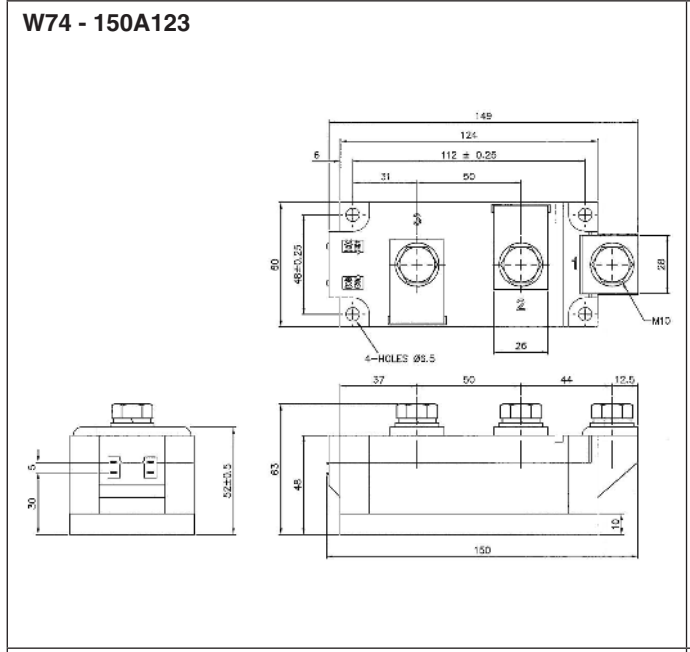
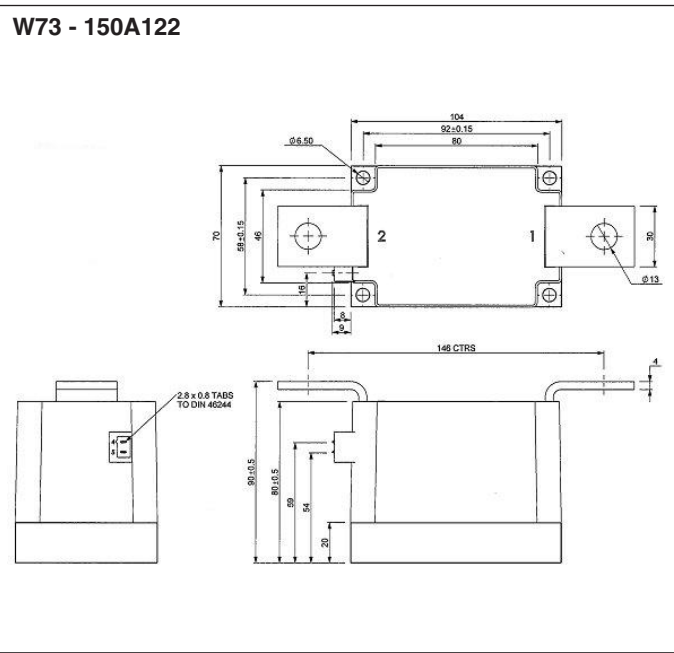
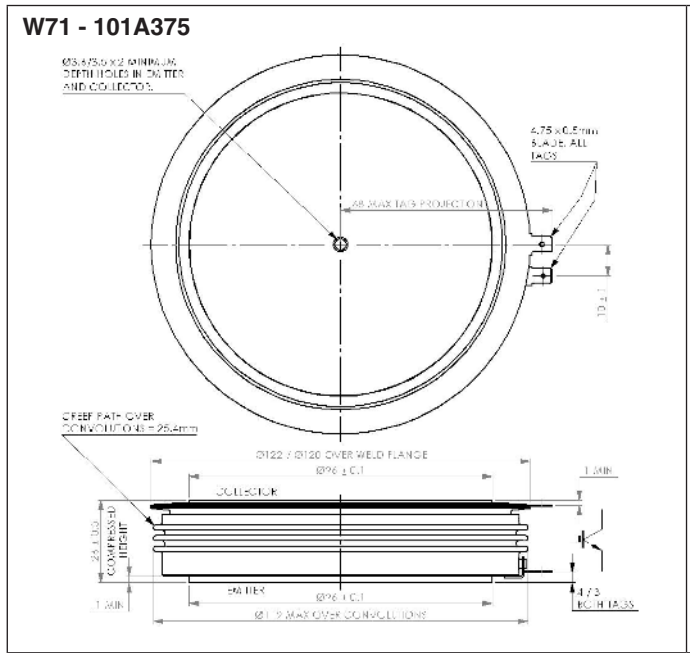
W68 - 100A367



W70 - 101A357

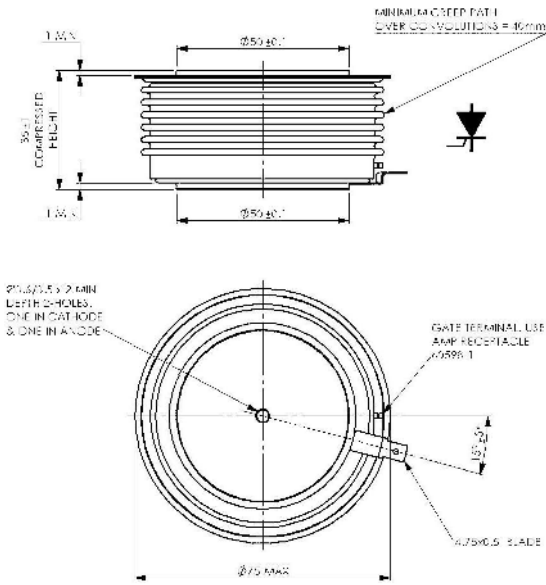


Dimensions in mm and inches (1 mm = 0.0394")

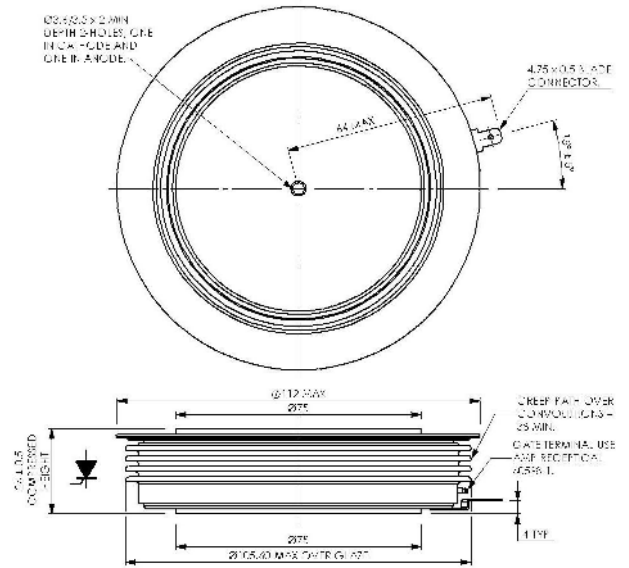


Dimensions in mm and inches (1 mm = 0.0394")

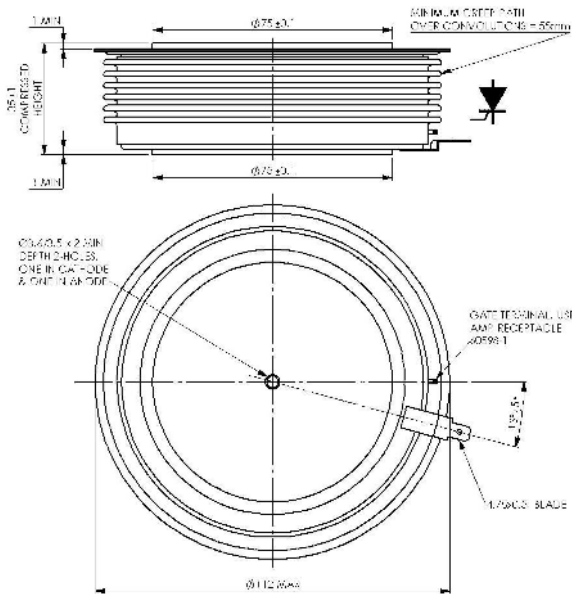
W78 - 101A393



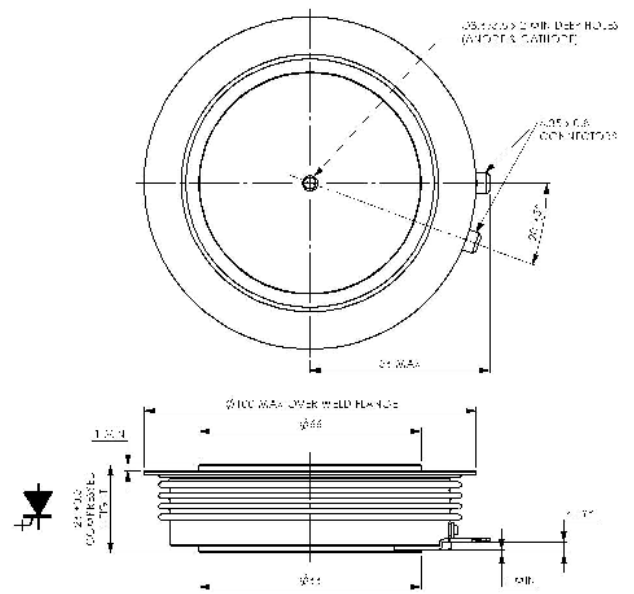
W81 - 101A373



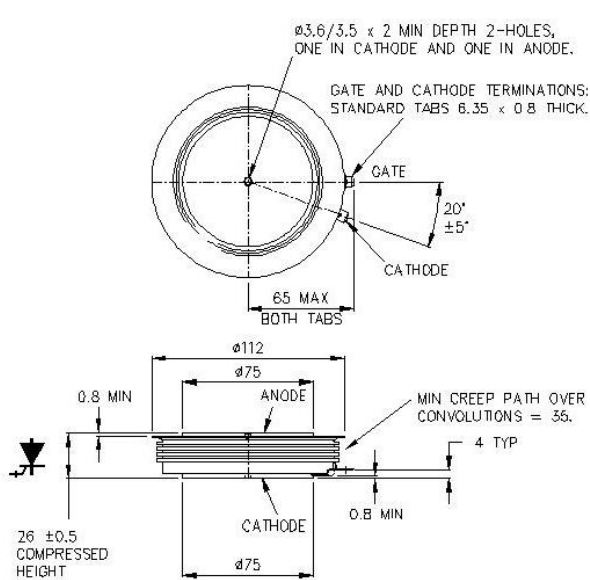
W82 - 101A395



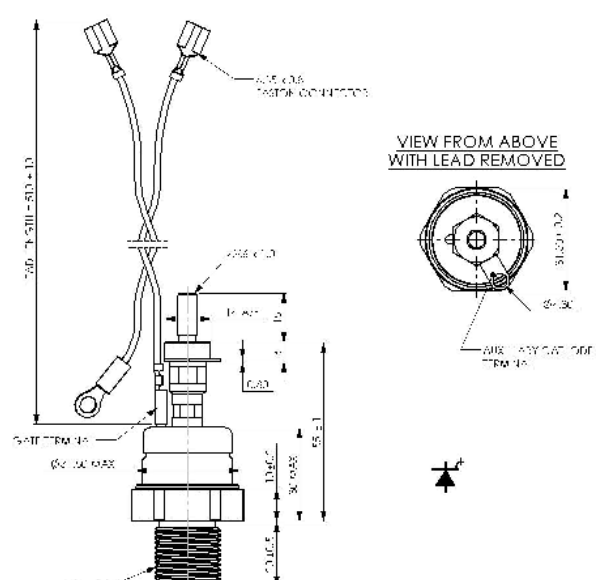
W85 - 101A388



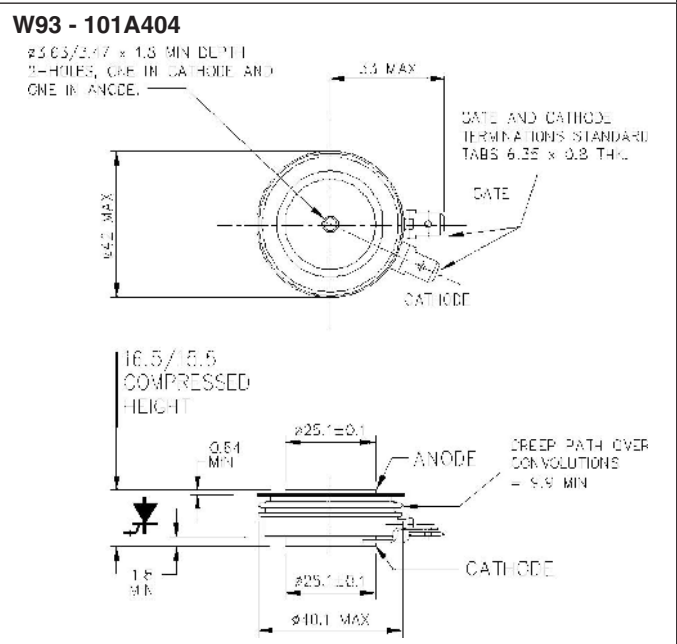
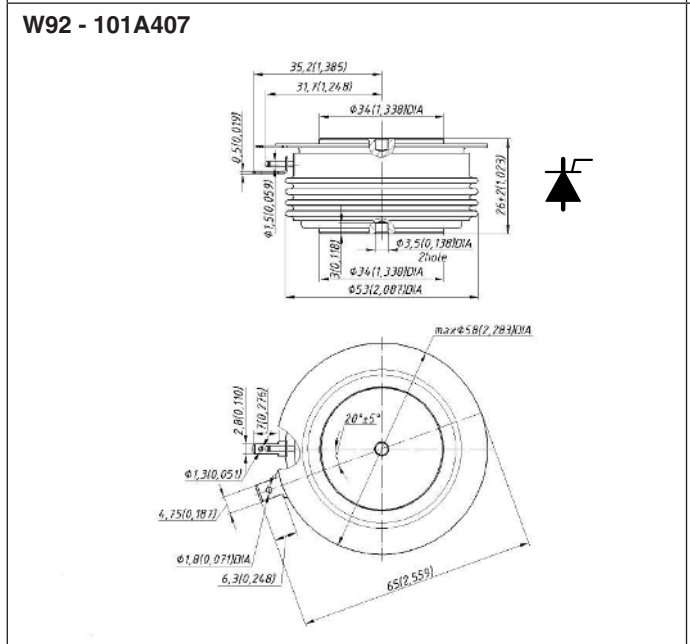
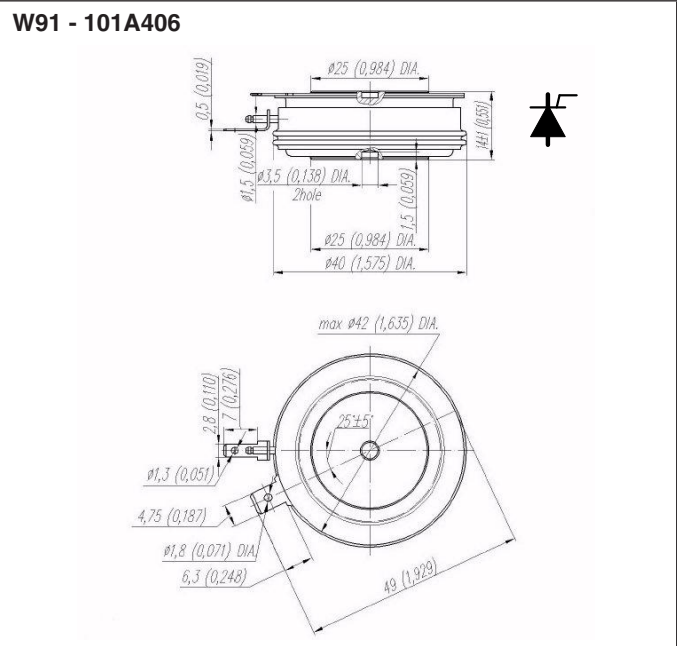
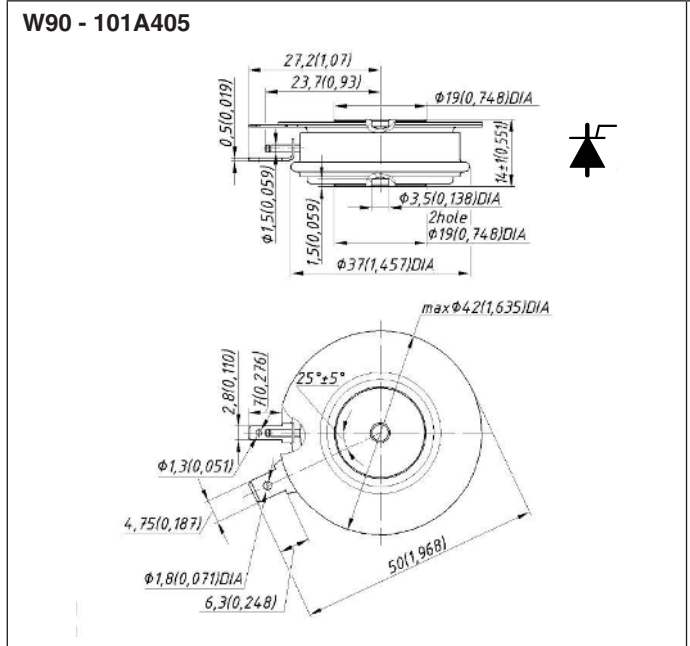
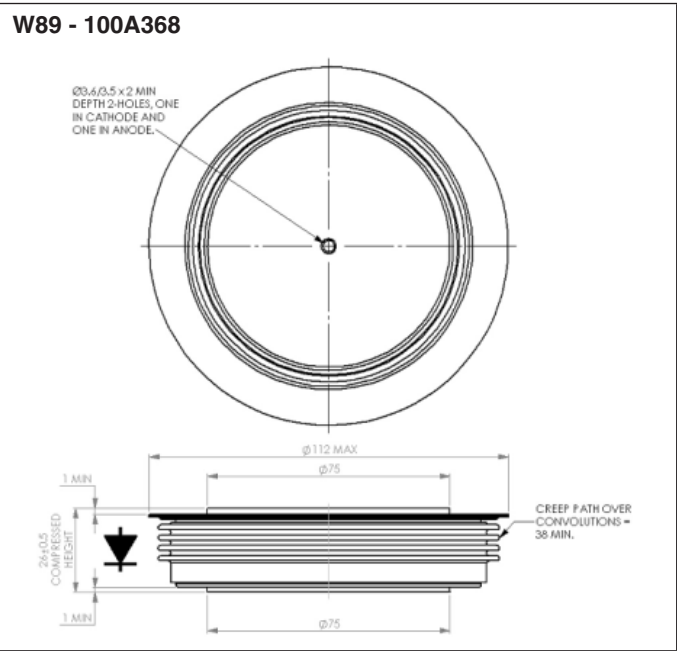
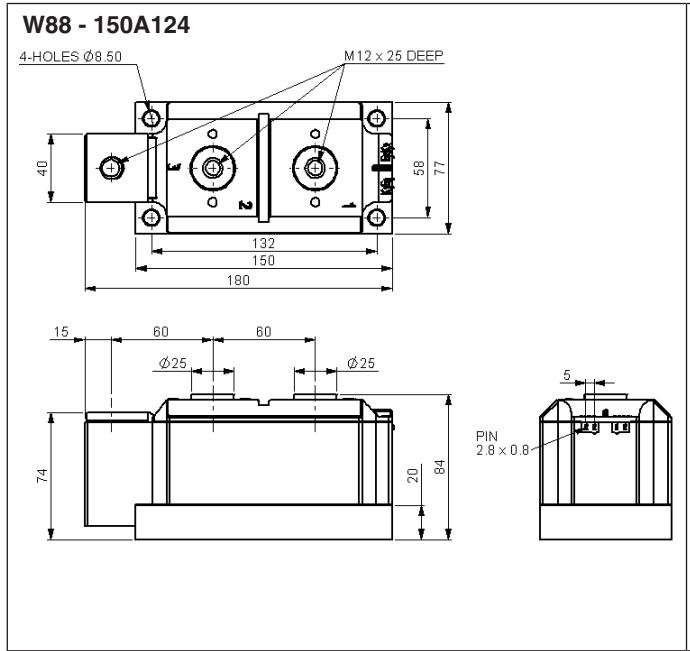
W86 - 101A316



W87 101A376



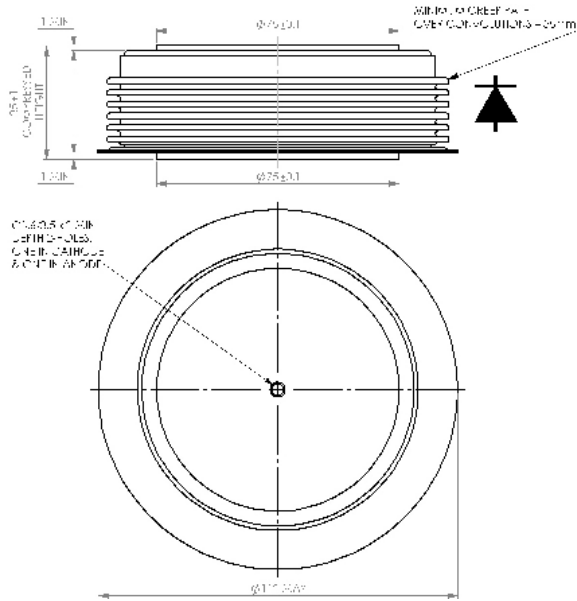
Dimensions in mm and inches (1 mm = 0.0394")



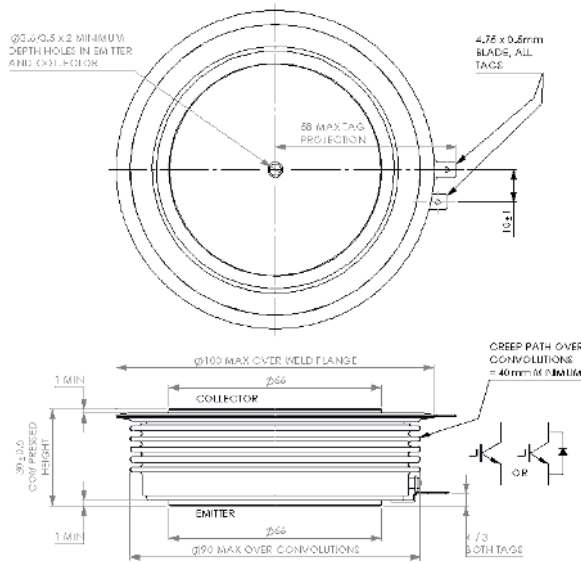
Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

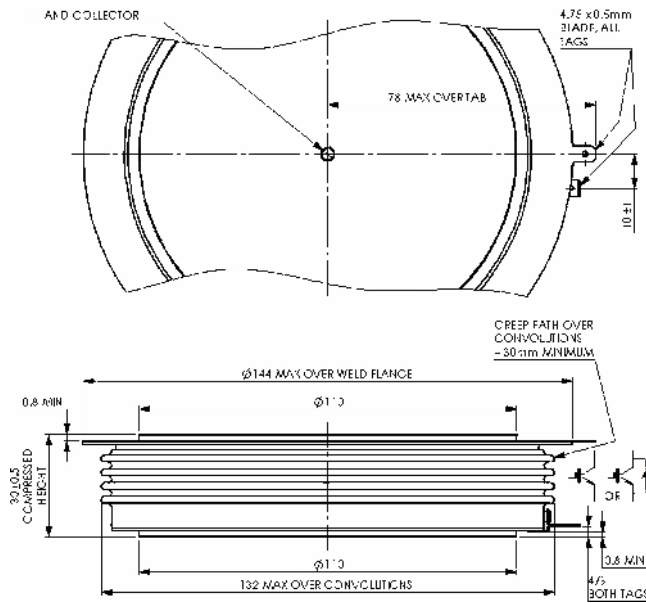
W94 - 100A372



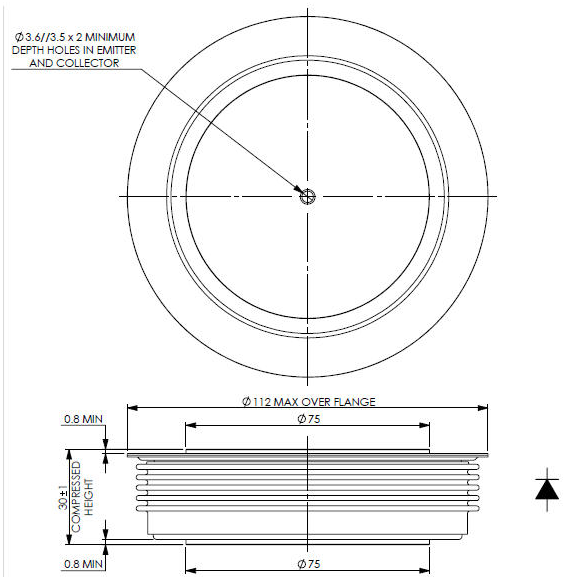
W95 - 101A403



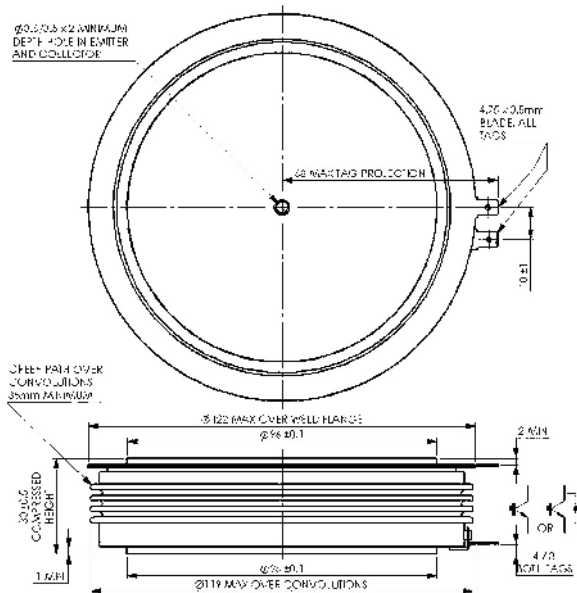
W96 - 101A409



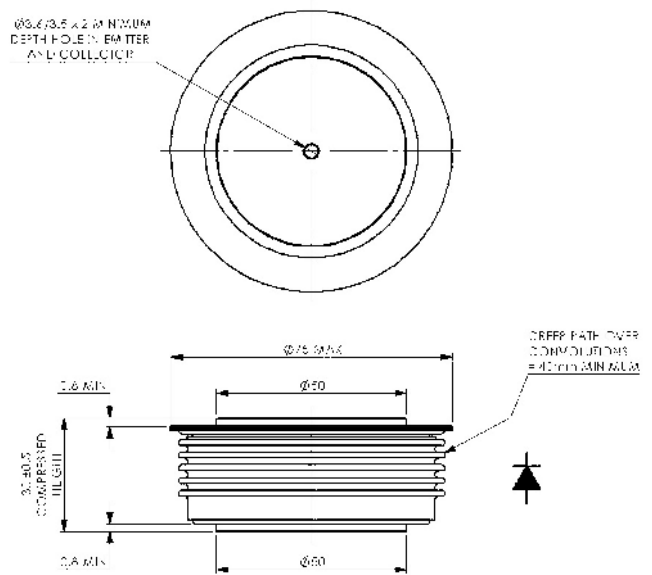
W97 - 100A379



W98 - 101A413



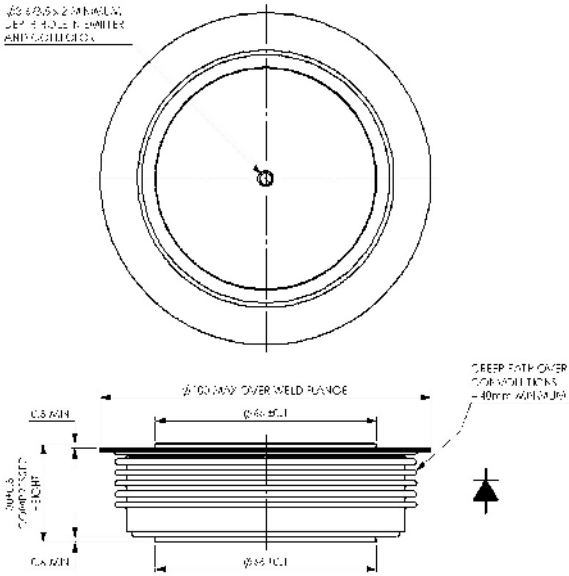
W99 - 100A383



Dimensions in mm and inches (1 mm = 0.0394")

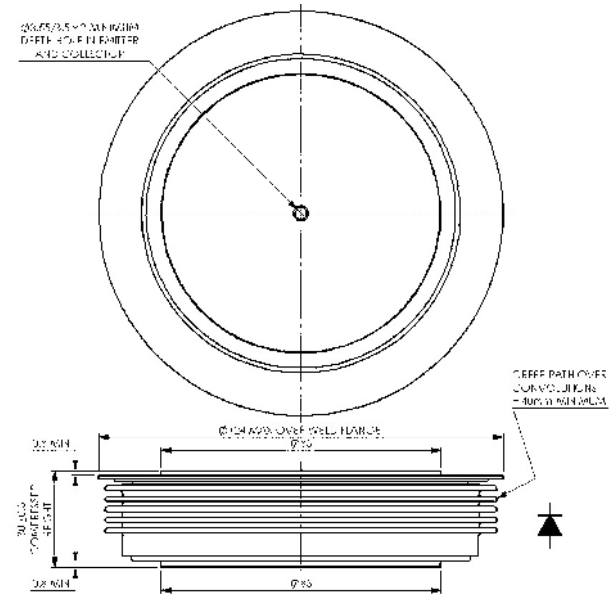
W100 - 100A384

50.8/25.4 X 2.00 MAXIMUM
DEPTH OF COLLLECTOR
AND COLLECTOR

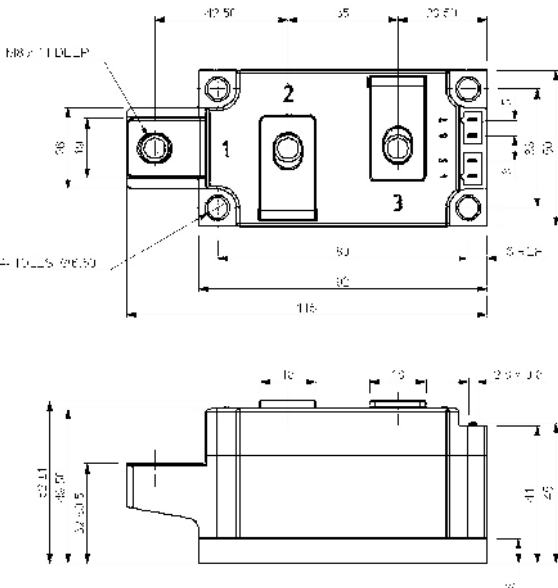


W101 - 100A380

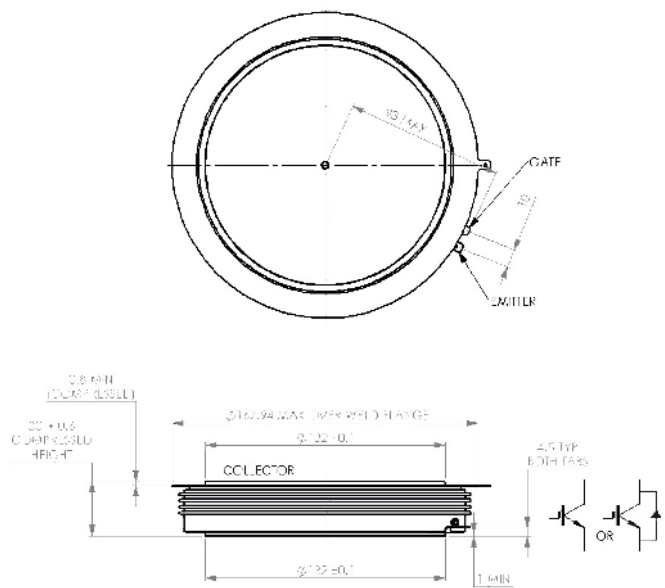
50.8/25.4 X 2.00 MAXIMUM
DEPTH OF COLLLECTOR
AND COLLECTOR



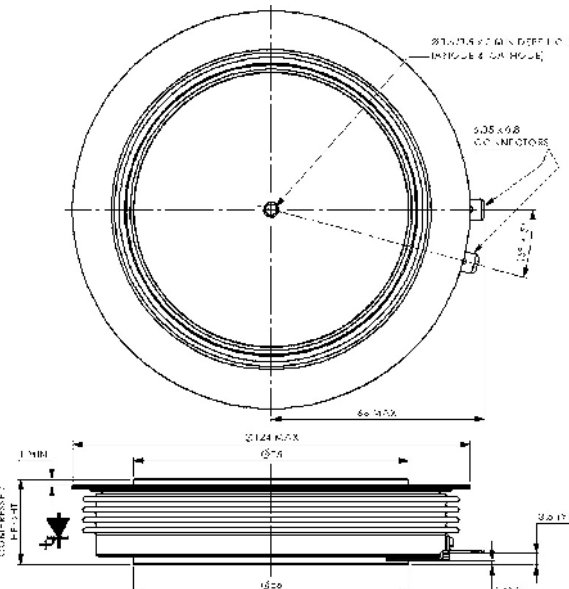
W102 - 150A125



W103 - 101A401

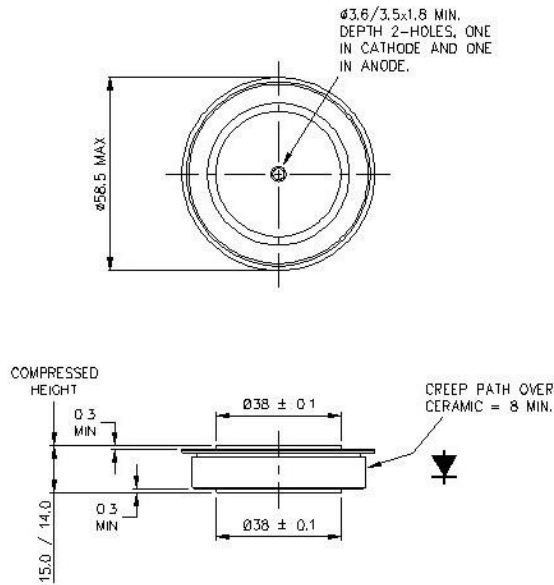


W104 - 101A408

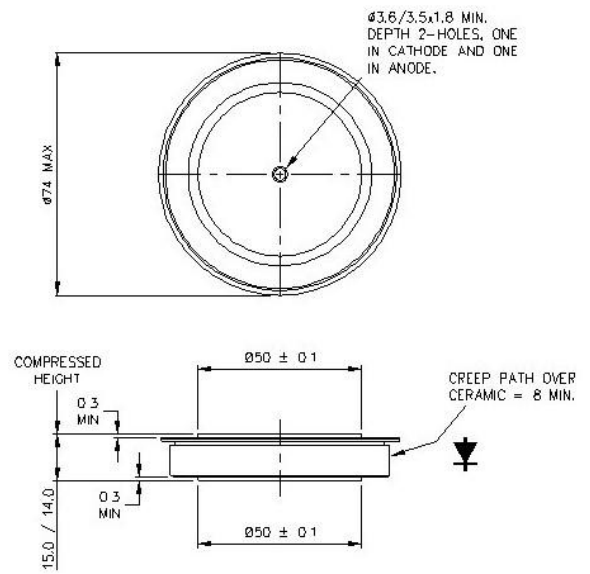


Dimensions in mm and inches (1 mm = 0.0394")

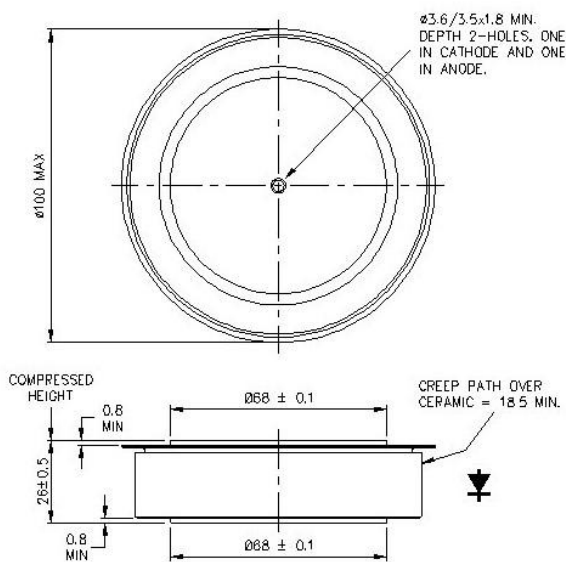
WD2 - 100A335



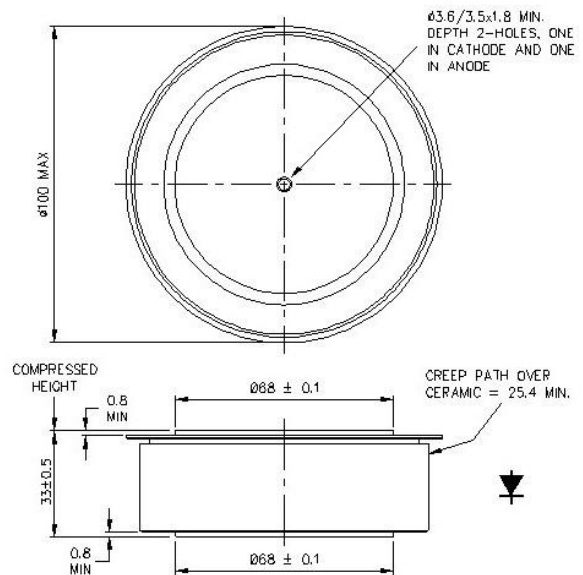
WD3 - 100A356



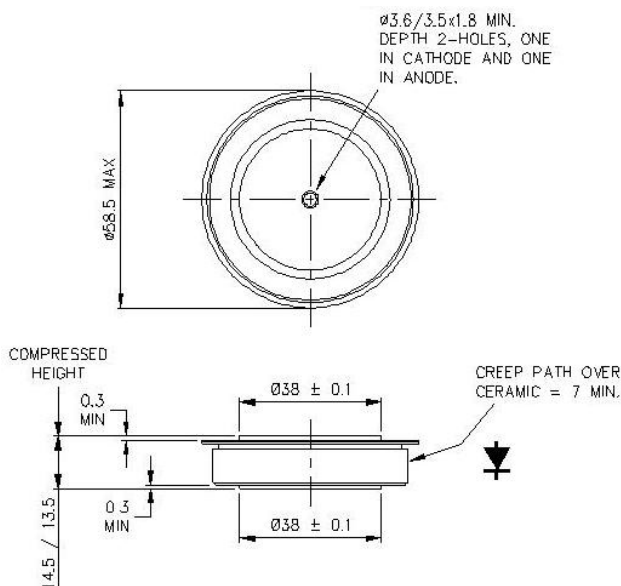
WD5 - 100A361 - 26 mm thick



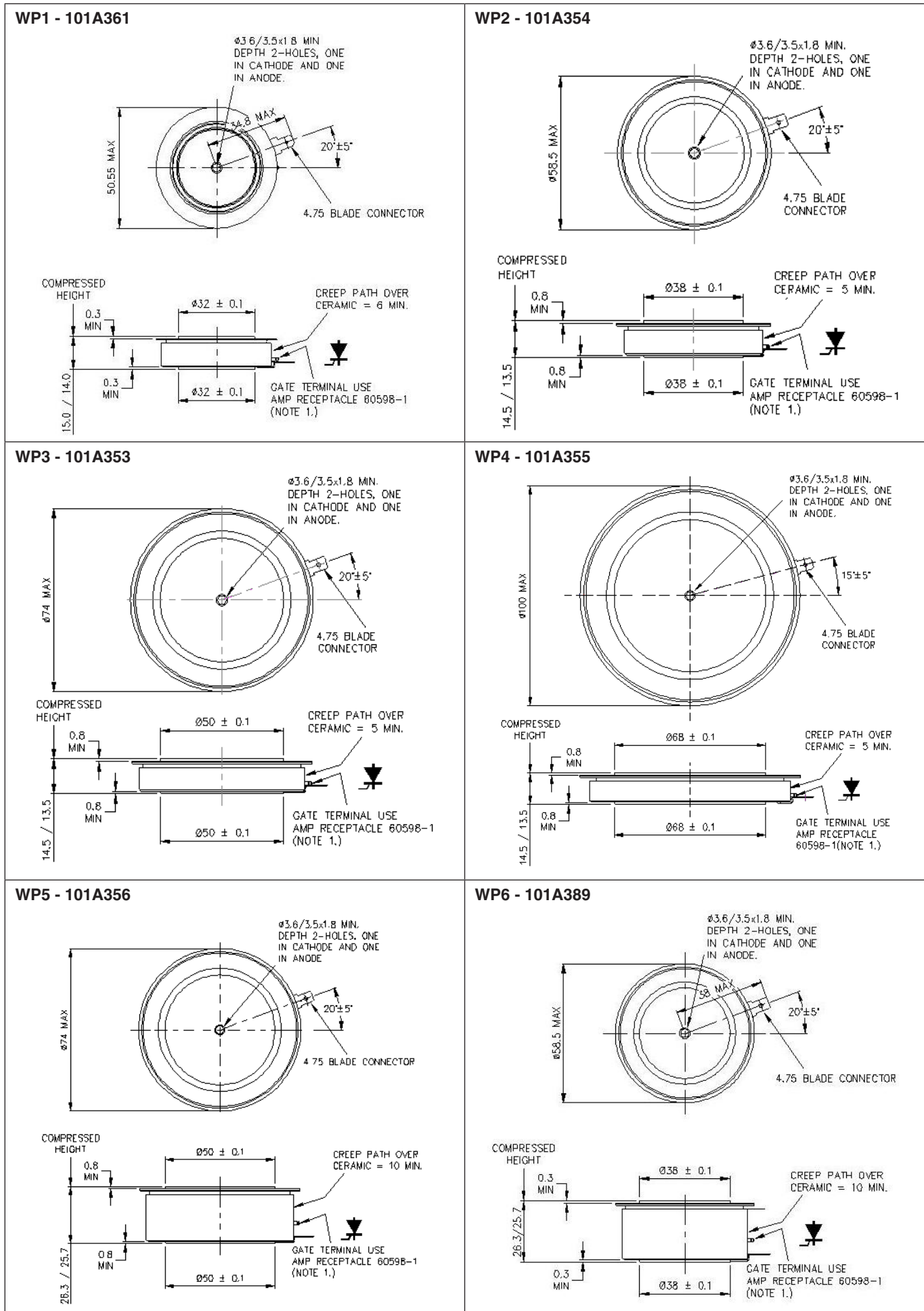
WD6 - 100A360 - 33 mm thick



WD7 - 100A363



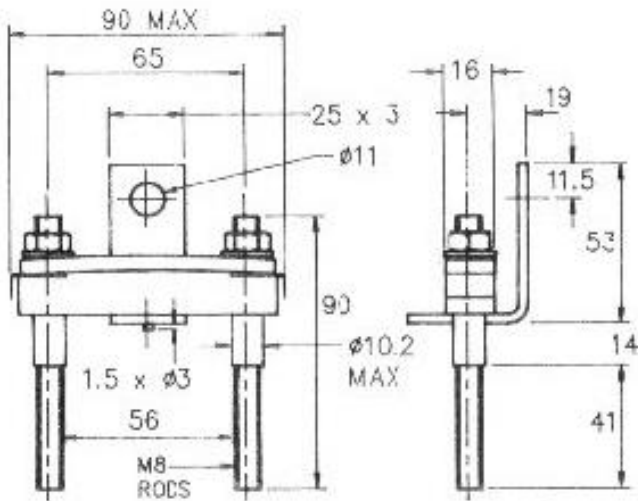
Dimensions in mm and inches (1 mm = 0.0394")



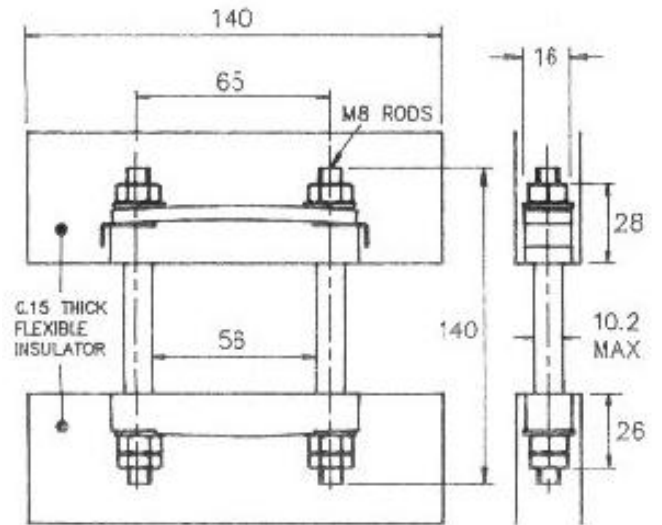
Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

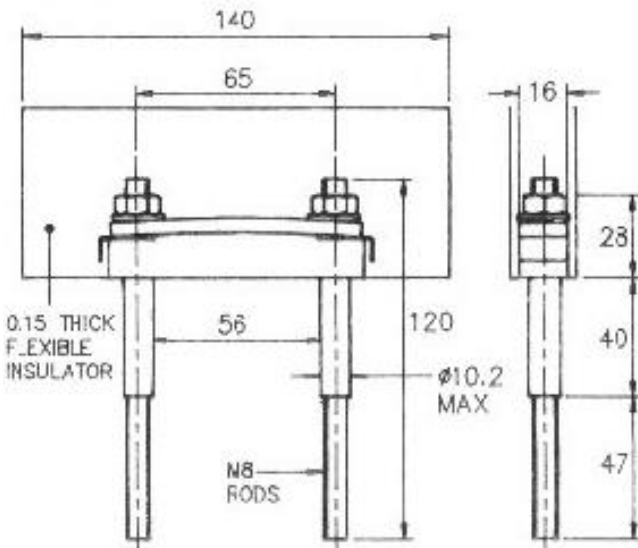
WC1 - XK0450SA056M



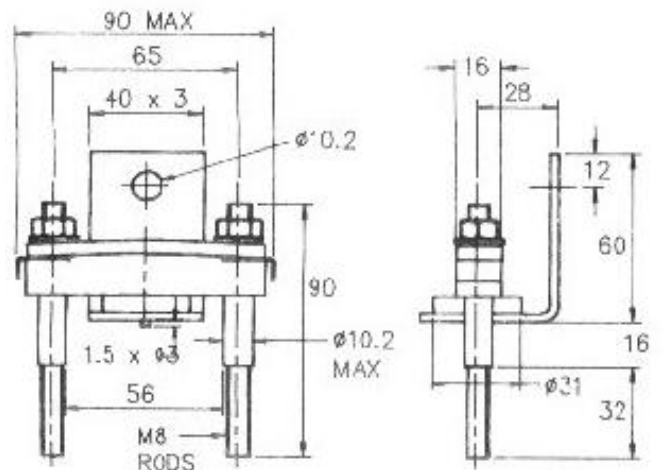
WC2 - XK0450DA056M



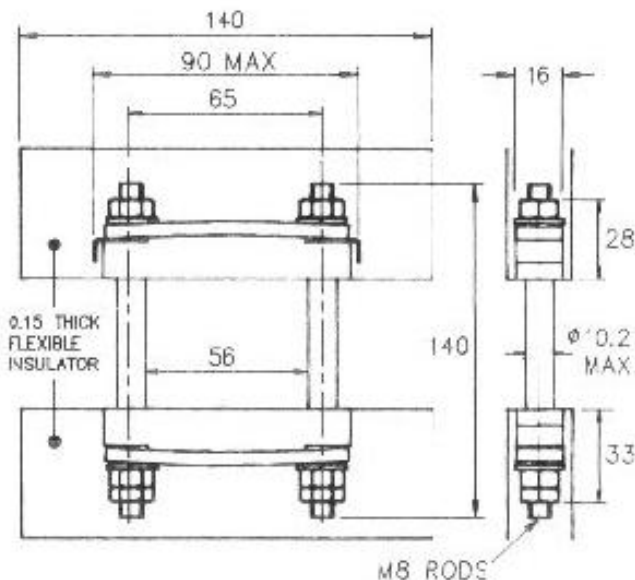
WC3 - XK0450DT056M



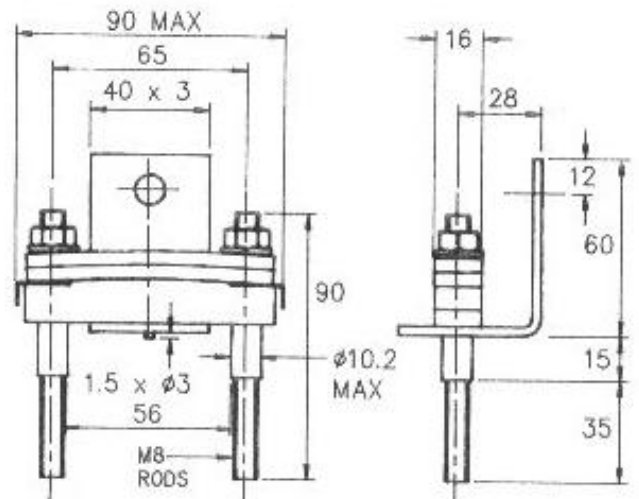
WC4 - XK0550SA056M



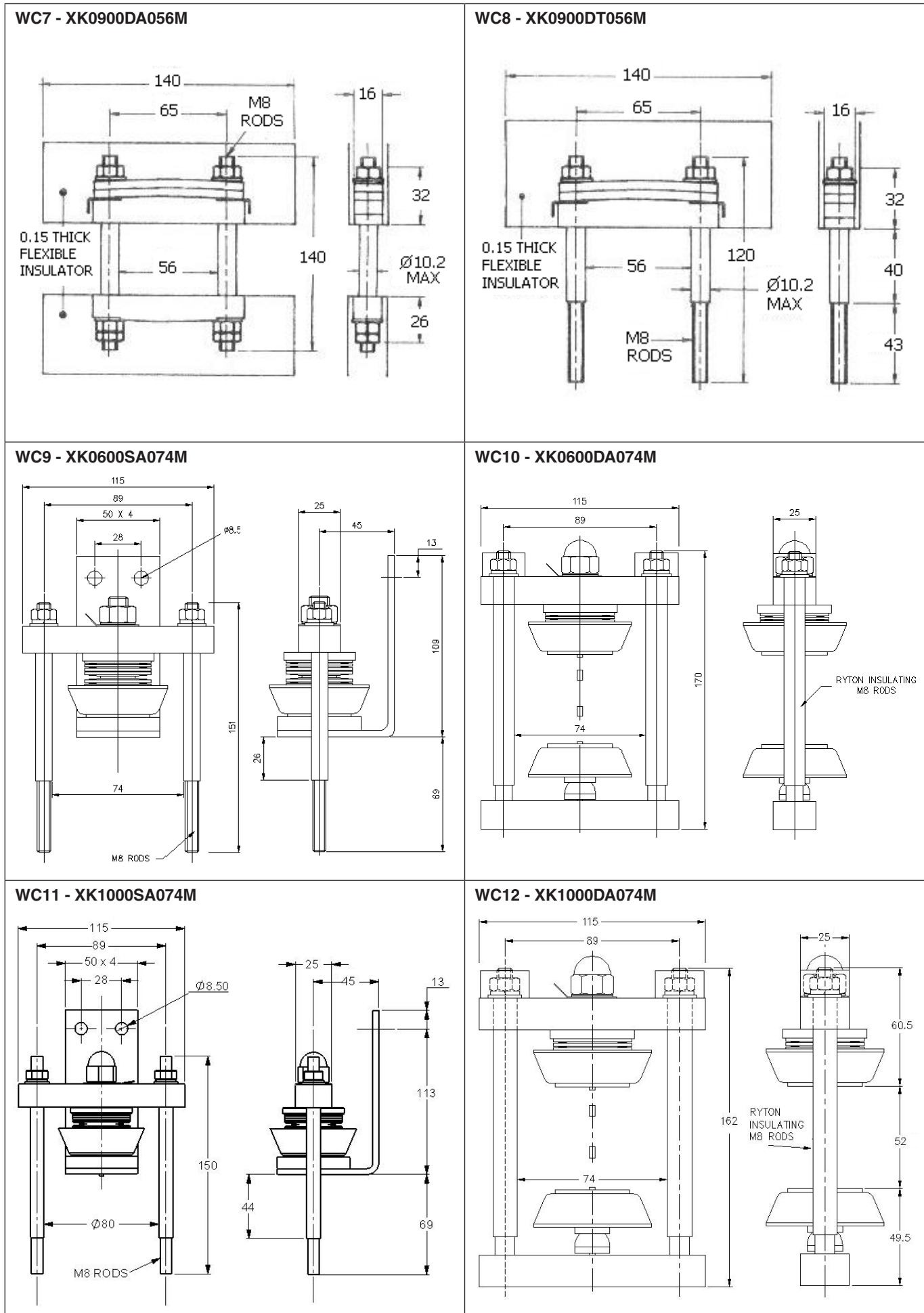
WC5 - XK0550DA056M



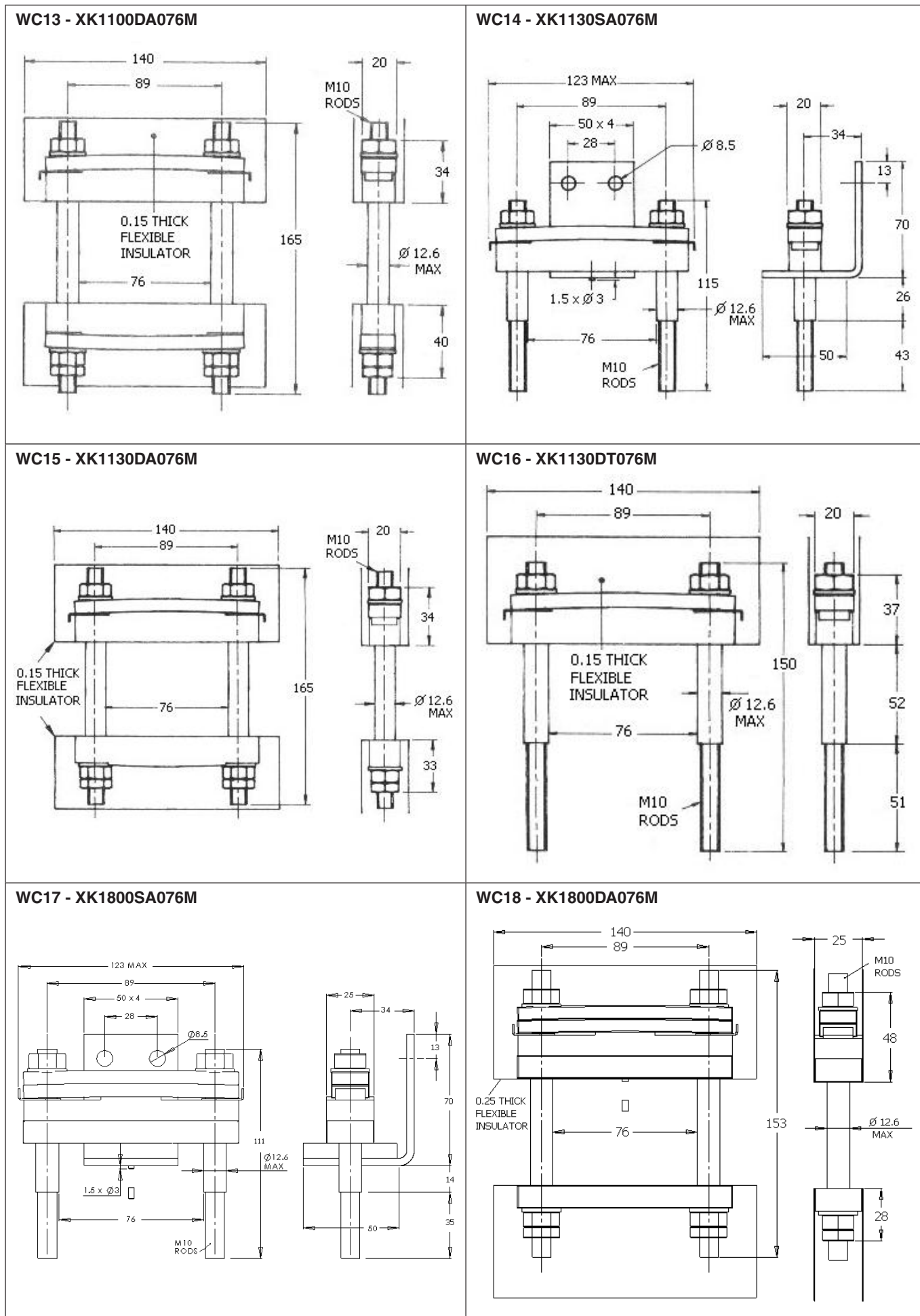
WC6 - XK0900SA056M



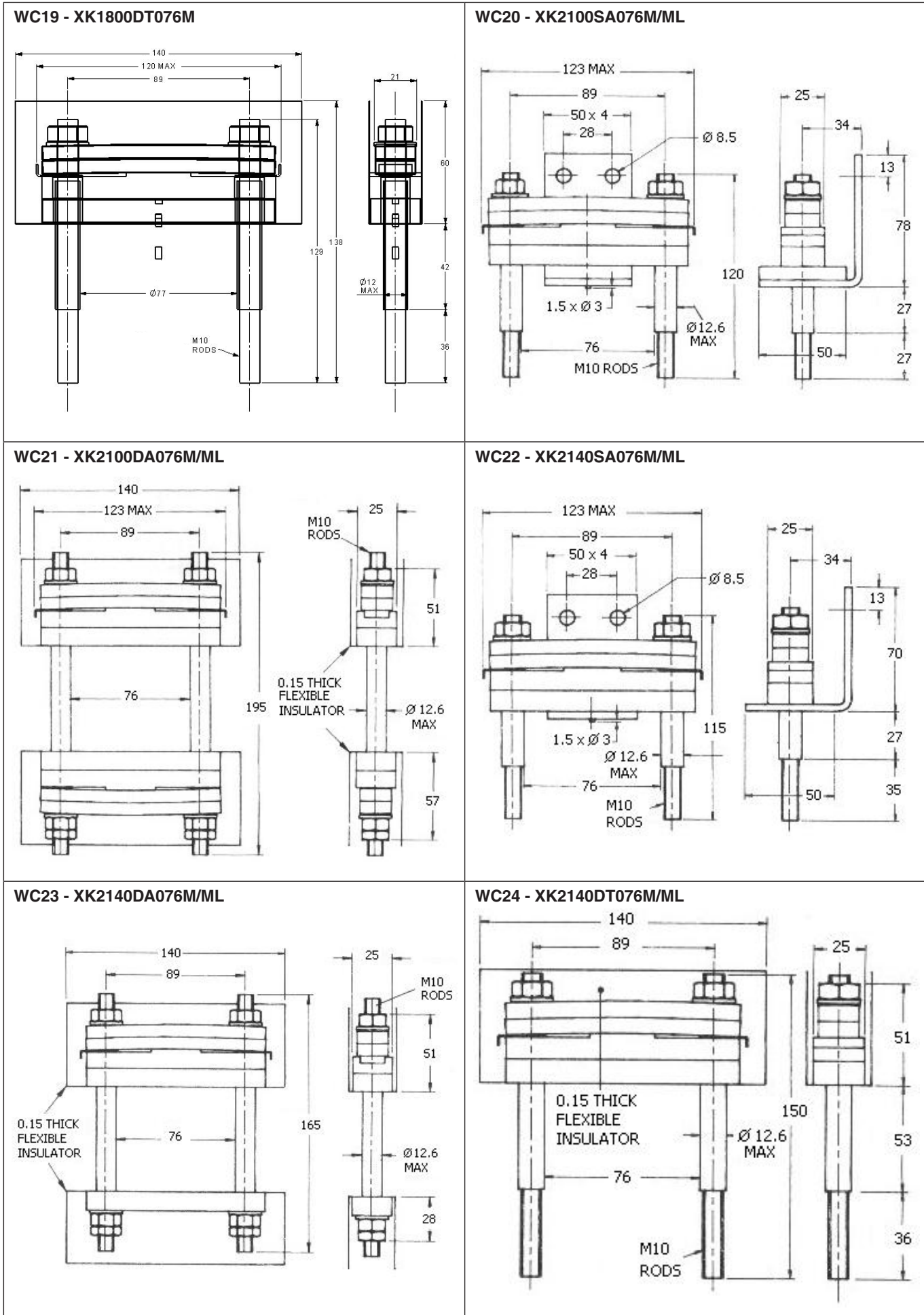
Dimensions in mm and inches (1 mm = 0.0394")



Dimensions in mm and inches (1 mm = 0.0394")

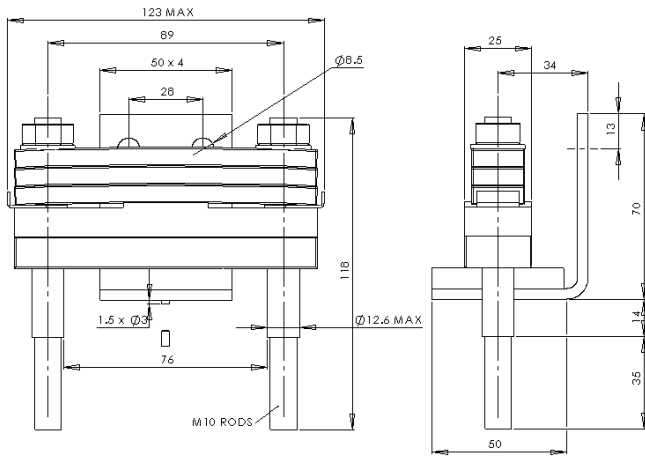


Dimensions in mm and inches (1 mm = 0.0394")

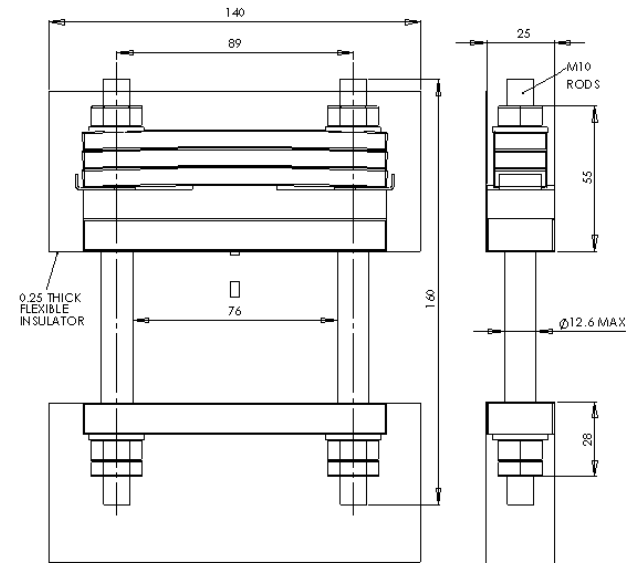


Dimensions in mm and inches (1 mm = 0.0394")

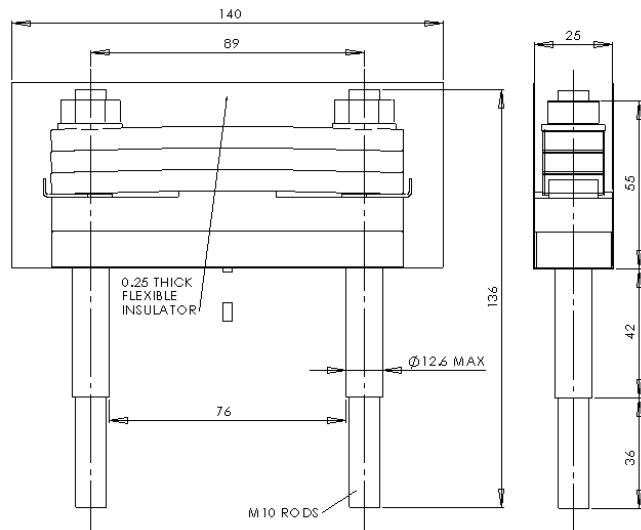
WC25 - XK2700SA076M



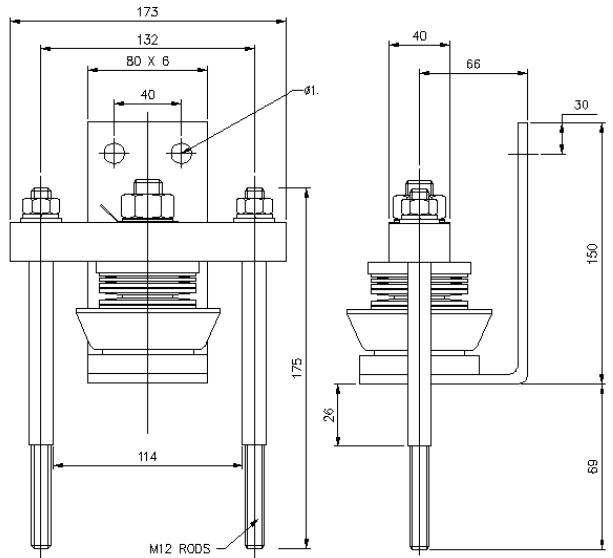
WC26 - XK2700DA076M



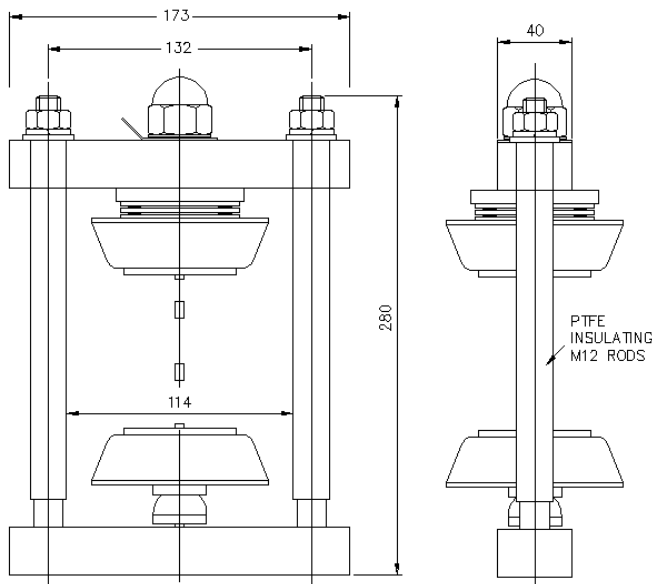
WC27 - XK2700DT076M



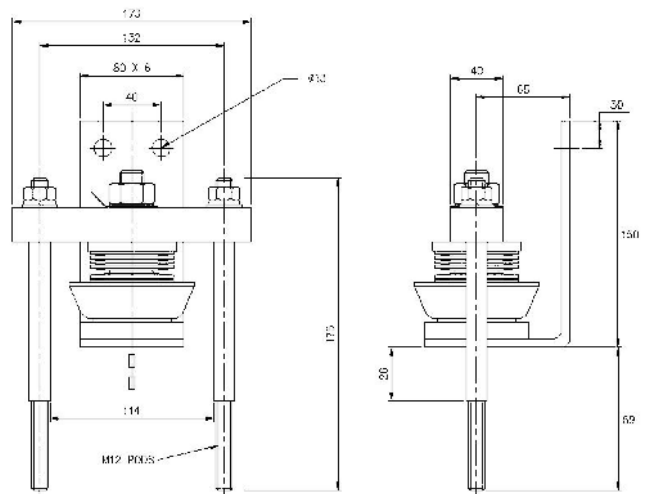
WC28 - XK2000SA114M



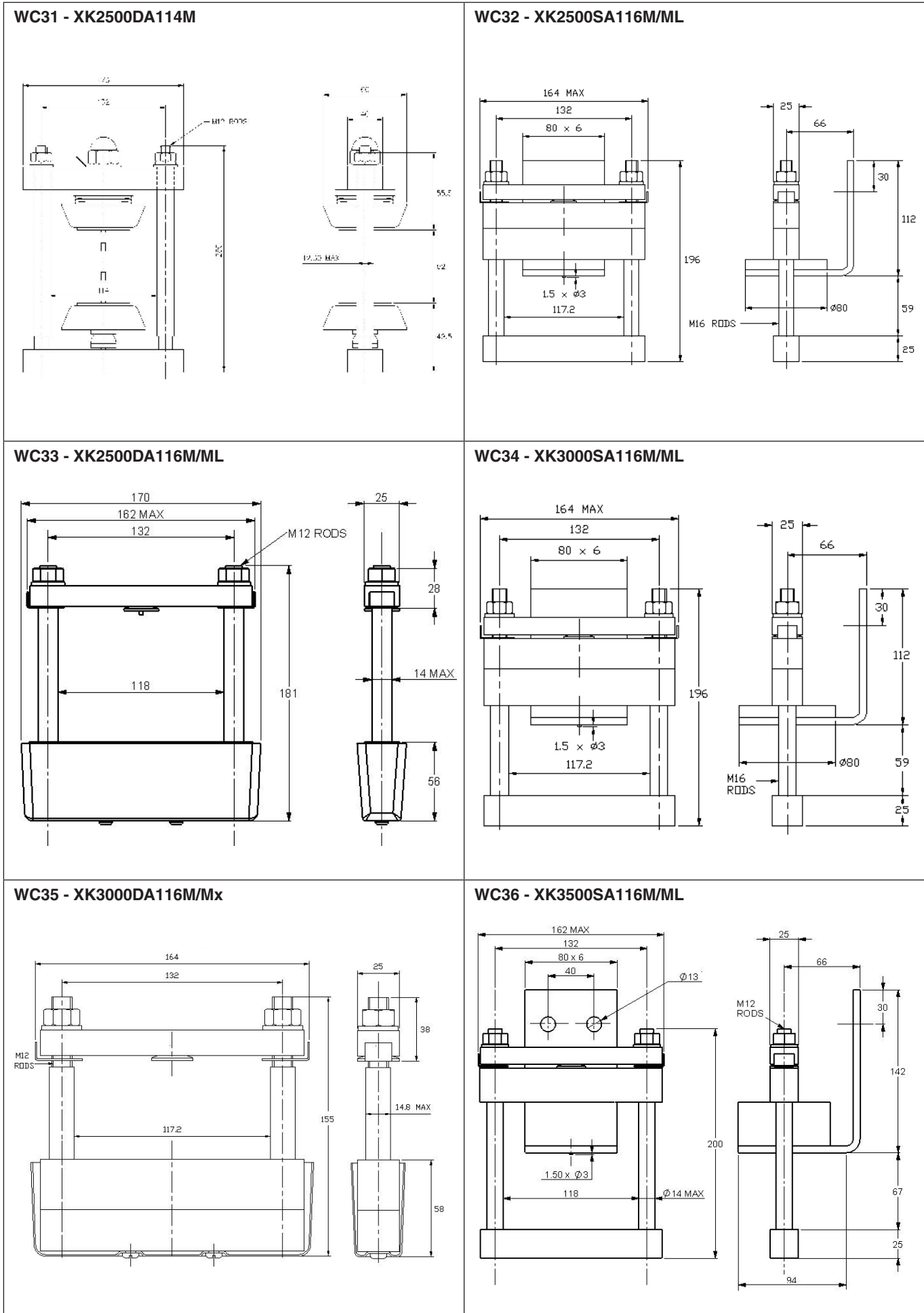
WC29 - XK2000DA114M



WC30 - XK2500SA114M

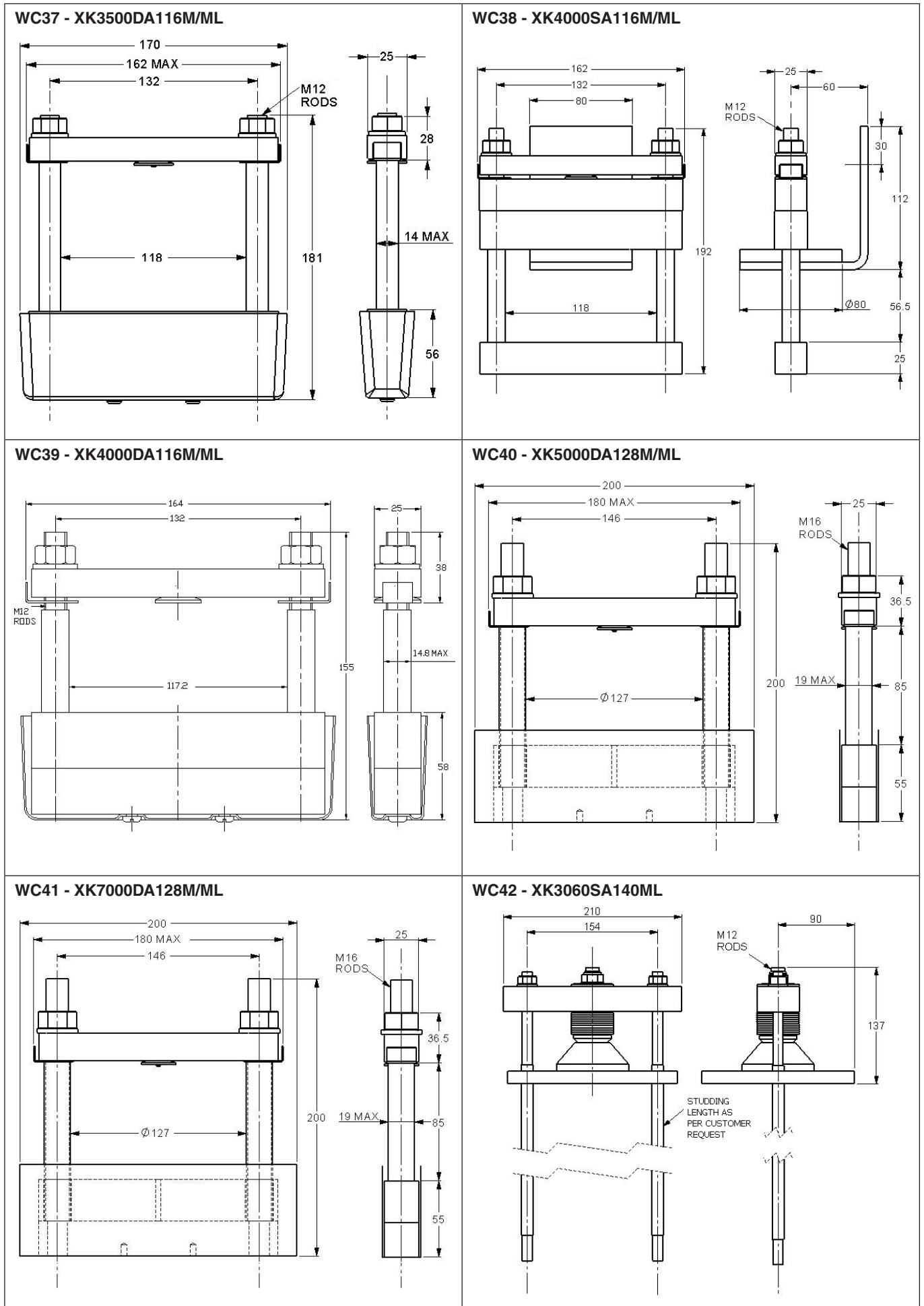


Dimensions in mm and inches (1 mm = 0.0394")

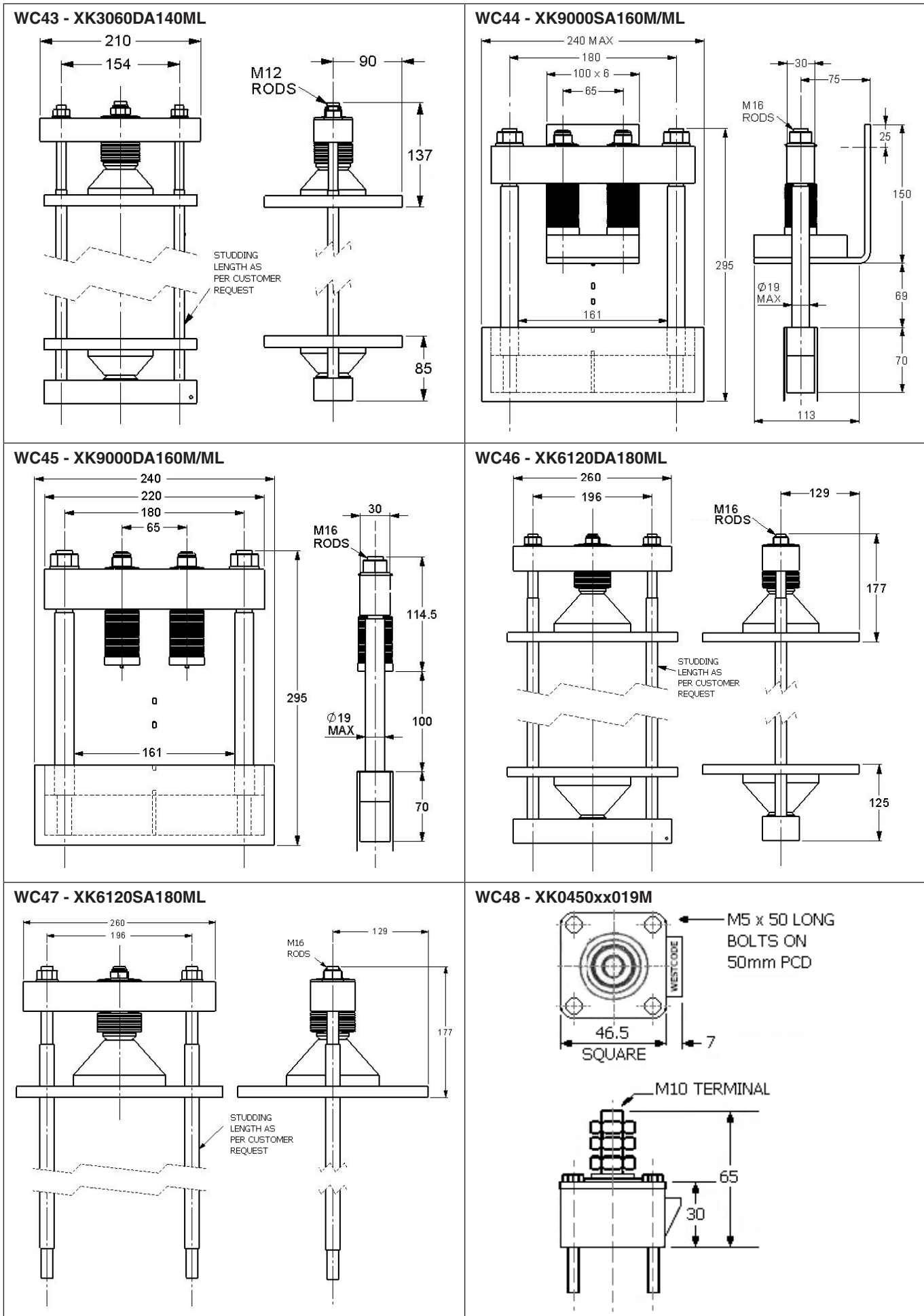


Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

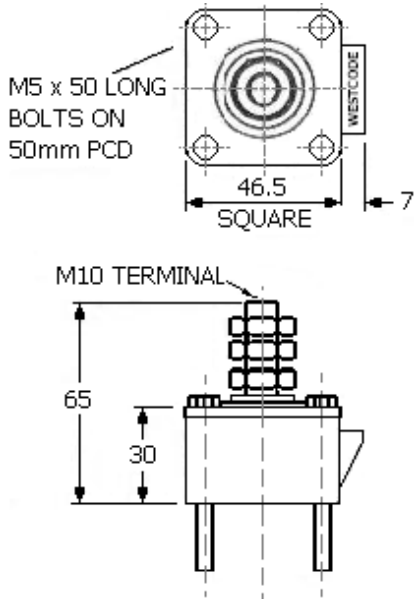


Dimensions in mm and inches (1 mm = 0.0394")

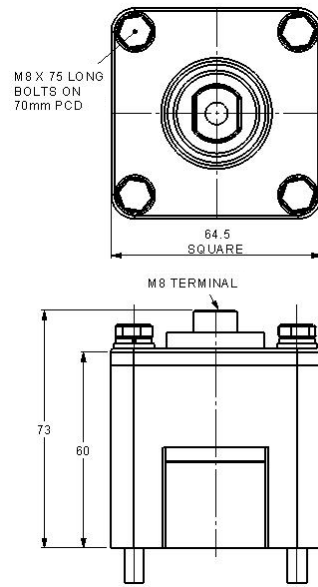


Dimensions in mm and inches (1 mm = 0.0394")

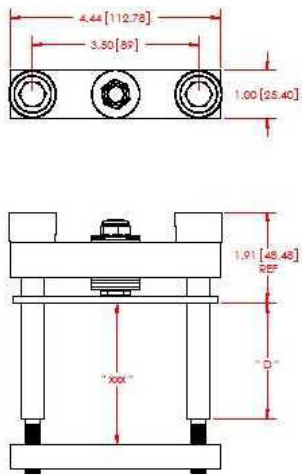
WC49 - XK####xx025M



WC50 - XK1500BA034M



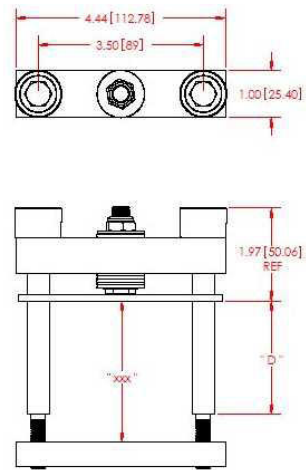
WC51 - XSK1500DA076xxx



Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

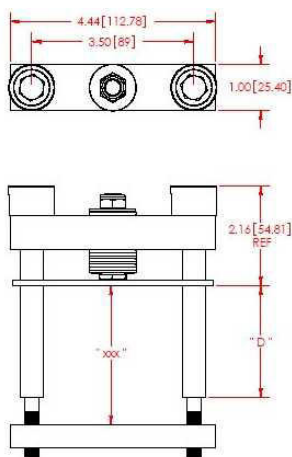
WC52 - XSK2000DA076xxx



Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

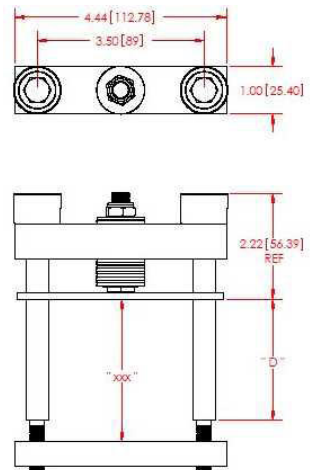
WC53 - XSK3000DA076xxx



Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

WC54 - XSK3400DA076xxx

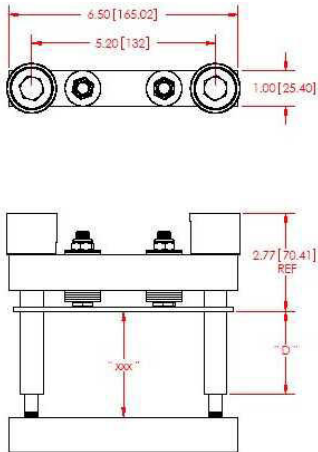


Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

Dimensions in mm and inches (1 mm = 0.0394")

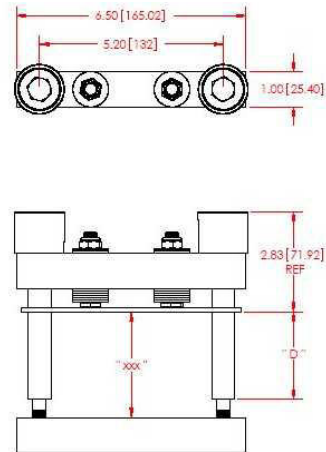
WC55 - SK3800DA116Mxxx



Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

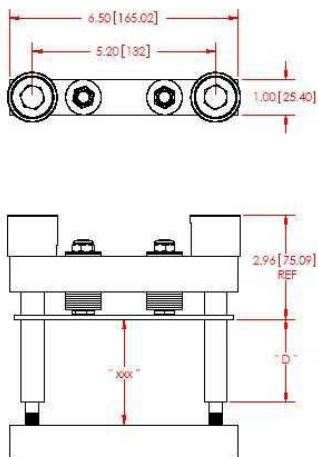
WC56 - XSK4400DA116Mxxx



Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

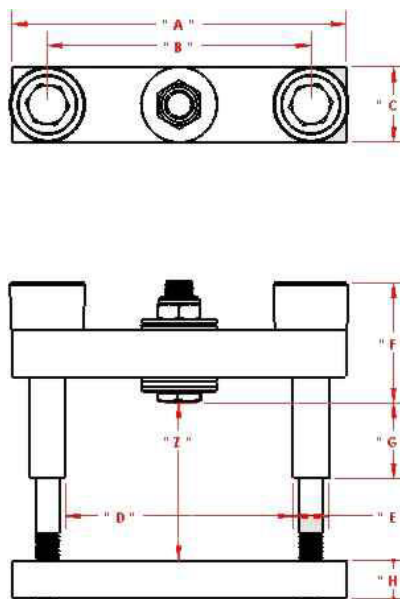
WC57 - XSK6000DA116Mxxx



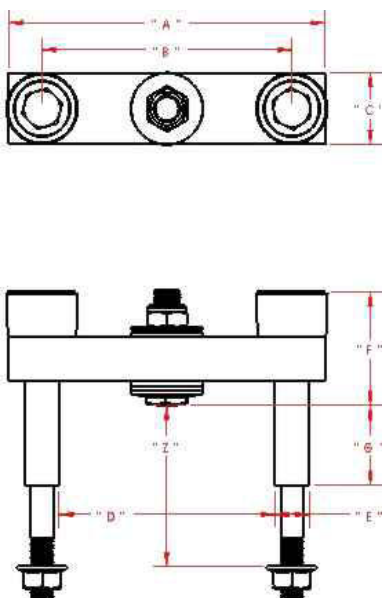
Notes:

1. DIMENSIONS IN INCHES [MILLIMETERS].
2. " Z " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.
3. " D " DIMENSION CAN BE CHANGED AS PER REQUIREMENT.

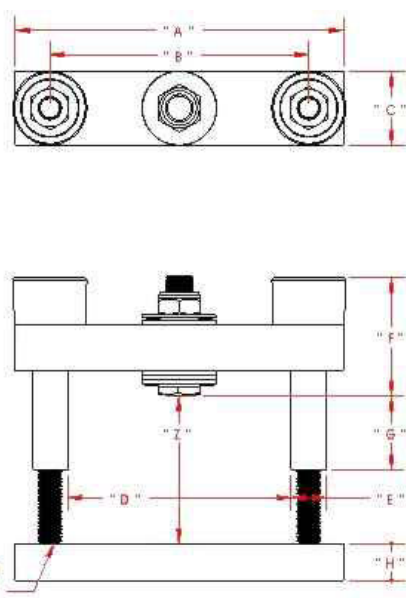
WC58- DA



WC59 - DT



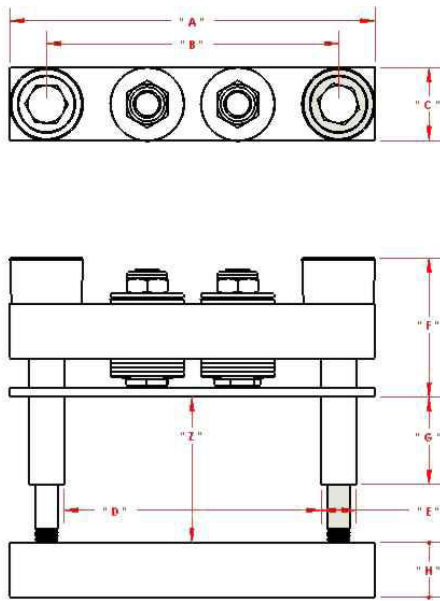
WC60 - DF



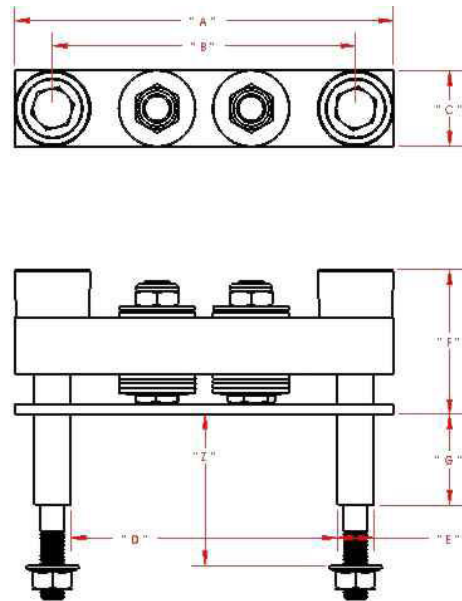
Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

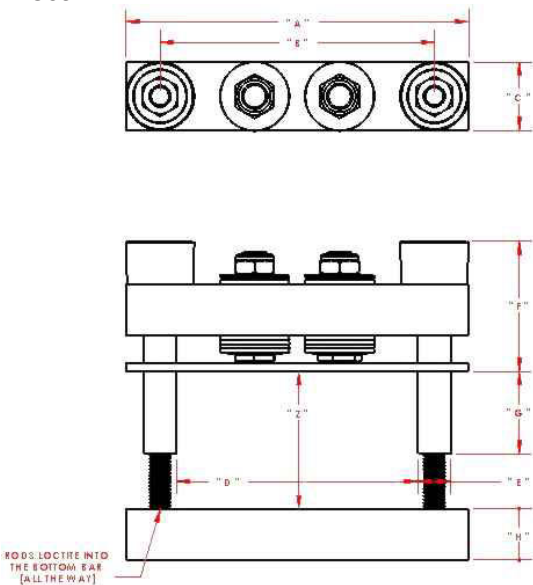
WC61 - DA



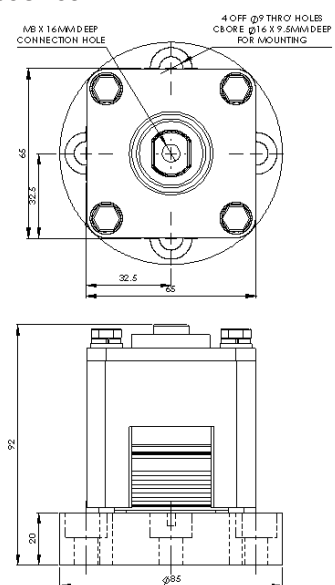
WC62 - DT



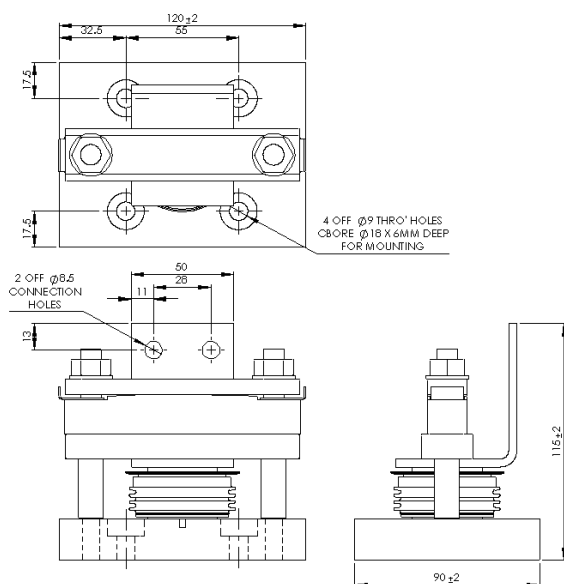
WC63 - DF



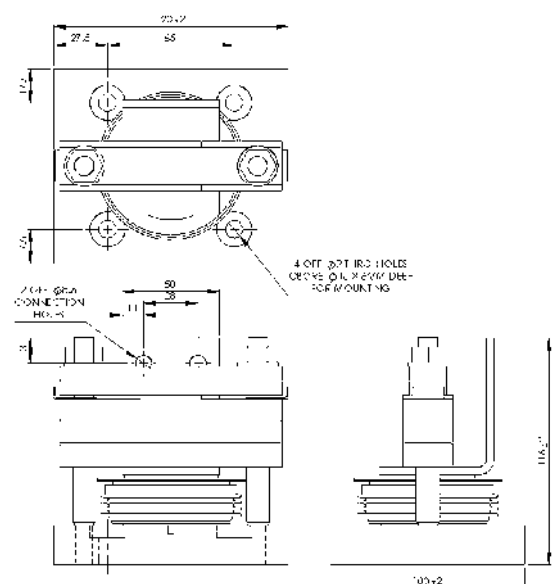
WC64 - XK1500CB034M



WC65 - XK1130SB076M



WC66 - XK2140SB076M



Dimensions in mm and inches (1 mm = 0.0394")

<p>WH1 - G FIN</p>	<p>WH2 - GA FIN</p>	<p>WH3 - H FIN</p>
<p>WH4 - T FIN</p>	<p>WH5 - TB FIN</p>	<p>WH6 - TC FIN</p>
<p>WH7 - LP100</p>	<p>WH8 - WS46</p>	<p>WH9 - WS30 - COPPER</p>

Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")

<p>WCL1 - LK COOLER</p>	<p>WCL2 - LKA COOLER</p>	<p>WCL3 - LKB COOLER</p>
<p>WCL4 - LKC COOLER</p>	<p>WCL5 - LKD COOLER</p>	<p>WCL6 - LKE COOLER</p>
<p>WCL7 - LKF</p>	<p>WCL8 - WS27</p>	<p>WCL9 - WS65 COOLER</p>

Dimensions in mm and inches (1 mm = 0.0394")

<p>WCL10 - WS69 COOLER</p> <p>2 OFF 3/8" BSPP x 34mm DEEP</p> <p>2 HOLES 9°/3</p>	<p>WCL11 - WS70 COOLER</p> <p>2 OFF 3/8" BSPP x 34mm DEEP</p>	<p>WCL12 - WS71-1 COOLER</p> <p>Nozzle suitable for 10mm hose</p>
<p>WCL13 - WS71-2 COOLER</p> <p>Nozzle suitable for 10mm hose</p>	<p>WCL14 - WS72-1 COOLER</p> <p>Nozzle suitable for 10mm hose</p>	<p>WCL15 - WS72-2 COOLER</p> <p>Nozzle suitable for 12mm hose</p>
<p>WCL16 - XW127ExxxA</p> <p>2 OFF 1/4" BSPP x 18mm DEEP</p>	<p>WCL17 - XW127ExxxB</p> <p>2 OFF 1/4" BSPP x 18mm DEEP</p>	<p>WCL18 - XW180GN25A</p>

Dimensions in mm and inches (1 mm = 0.0394")

X003 TO-251 AA Weight = 0.4 g

Dim.	Millimeters		Inches	
	min	max	min	max
A	2.19	2.38	0.086	0.094
A1	0.89	1.14	0.035	0.045
b	0.64	0.89	0.025	0.035
b1	0.76	1.14	0.030	0.045
b2	5.21	5.46	0.205	0.215
c	0.46	0.58	0.018	0.023
c1	0.46	0.58	0.018	0.023
D	5.97	6.22	0.235	0.245
E	6.35	6.73	0.250	0.265
e	2.28 BSC		0.090 BSC	
e1	4.57 BSC		0.180 BSC	
H	17.02	17.78	0.670	0.700
L	8.89	9.65	0.350	0.380
L1	1.91	2.28	0.075	0.090
L2	0.89	1.27	0.035	0.050
L3	1.15	1.52	0.045	0.060

X004 TO-252 AA (D PAK) Weight = 0.3 g

Dim.	Millimeters		Inches	
	min	max	min	max
A	2.20	2.40	0.087	0.094
A1	2.10	2.50	0.083	0.098
b	0.66	0.86	0.026	0.034
b2	-	0.96	-	0.038
b3	5.04	5.64	0.198	0.222
b4	4.34 BSC		0.171 BSC	
b5	0.50 BSC		0.020 BSC	
c	0.40	0.60	0.016	0.024
D	5.90	6.30	0.232	0.248
E	6.40	6.80	0.252	0.268
e	2.10	2.50	0.083	0.098
H	9.20	9.80	0.362	0.386
L	0.55	1.02	0.022	0.040
L1	2.50	2.90	0.098	0.114
L2	0.40	0.60	0.016	0.024
L3	0.50	0.90	0.020	0.035
L4	0.60	1.00	0.024	0.039
L5	0.82	1.22	0.032	0.048
L6	0.79	0.99	0.031	0.039
L7	0.81	1.01	0.032	0.040
L8	0.40	0.80	0.016	0.031
L9	1.50 BSC		0.059 BSC	
Ø P	1.00 BSC		0.039 BSC	

X005a TO-220 AB Weight = 2 g

Dim.	Millimeters		Inches	
	min	max	min	max
A	4.32	4.82	0.170	0.190
A1	1.14	1.39	0.045	0.055
A2	2.29	2.79	0.090	0.110
b	0.64	1.01	0.025	0.040
b2	1.15	1.65	0.045	0.065
C	0.35	0.56	0.014	0.022
D	14.73	16.00	0.580	0.630
E	9.91	10.66	0.390	0.420
e	2.54 BSC		0.100 BSC	
H1	5.85	6.85	0.230	0.270
L	12.70	13.97	0.500	0.550
L1	2.79	5.84	0.110	0.230
Ø P	3.54	4.08	0.139	0.161
Q	2.54	3.18	0.100	0.125

X005b TO-220 AC Weight = 2 g

Dim.	Millimeters		Inches	
	min	max	min	max
A	4.32	4.82	0.170	0.190
A1	1.14	1.39	0.045	0.055
A2	2.29	2.79	0.090	0.110
b	0.64	1.01	0.025	0.040
b2	1.15	1.65	0.045	0.065
C	0.35	0.56	0.014	0.022
D	14.73	16.00	0.580	0.630
E	9.91	10.66	0.390	0.420
e	5.08 BSC		0.200 BSC	
H1	5.85	6.85	0.230	0.270
L	12.70	13.97	0.500	0.550
L1	2.79	5.84	0.110	0.230
Ø P	3.54	4.08	0.139	0.161
Q	2.54	3.18	0.100	0.125

X006 TO-220 (5) Weight = 2 g

Dim.	Millimeters		Inches	
	min	max	min	max
A	4.32	4.82	0.170	0.190
A1	1.14	1.39	0.045	0.055
A2	2.29	2.79	0.090	0.110
b	0.64	1.01	0.025	0.040
c	0.38	0.64	0.015	0.025
D	14.73	15.75	0.580	0.620
D1	8.64	9.40	0.340	0.370
E	9.91	10.54	0.390	0.415
e	1.70 BSC		0.067 BSC	
k	0.00	0.36	0.000	0.014
L	25.27	26.54	0.995	1.045
L1	11.94	12.95	0.470	0.510
Ø P	3.53	3.96	0.139	0.156

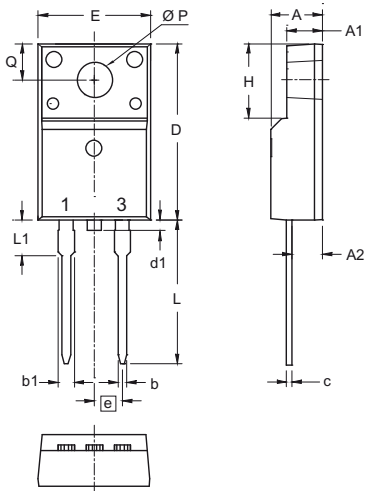
X007a TO-220 ABFP Weight = 2 g

Dim.	Millimeters		Inches	
	min	max	min	max
A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.56	2.96	0.101	0.117
b	0.70	0.90	0.028	0.035
b1	1.27	1.47	0.050	0.058
c	0.45	0.60	0.018	0.024
D	15.67	16.07	0.617	0.633
E	9.96	10.36	0.392	0.408
e	2.54 BSC		0.100 BSC	
H	6.48	6.88	0.255	0.271
L	12.68	13.28	0.499	0.523
L1	3.03	3.43	0.119	0.135
Ø P	3.08	3.28	0.121	0.129
Q	3.20	3.40	0.126	0.134

Dimensions in mm and inches (1 mm = 0.0394")

X007b TO-220 ACFP

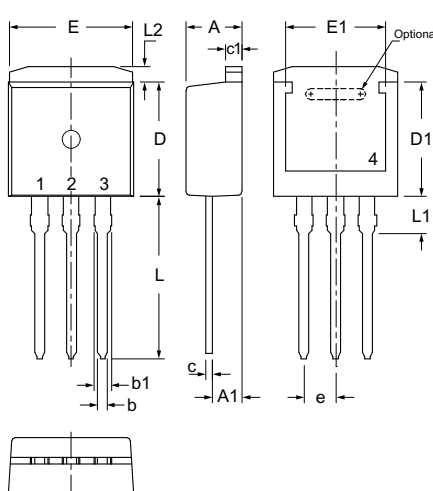
Weight = 2 g



Dim.	Millimeters		Inches	
	min	max	min	max
A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.56	2.96	0.101	0.117
b	0.70	0.90	0.028	0.035
b1	1.27	1.47	0.050	0.058
c	0.45	0.60	0.018	0.024
D	15.67	16.07	0.617	0.633
d1	0.00	1.10	0.000	0.043
E	9.96	10.36	0.392	0.408
e	2.54 BSC		0.100 BSC	
H	6.48	6.88	0.255	0.271
L	12.68	13.28	0.499	0.523
L1	3.03	3.43	0.119	0.135
Ø P	3.08	3.28	0.121	0.129
Q	3.20	3.40	0.126	0.134

X008a TO-262 I²PAK

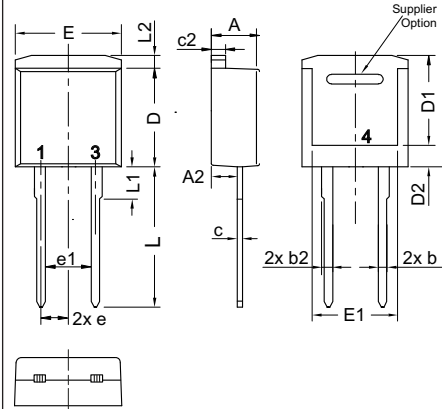
Weight = 1.5 g



Dim.	Millimeters		Inches	
	min	max	min	max
A	4.30	4.70	0.169	0.185
A1	2.20	2.60	0.087	0.102
b	0.70	0.90	0.028	0.035
b1	1.37	1.57	0.054	0.062
c	0.45	0.60	0.018	0.024
c1	1.25	1.40	0.049	0.055
D	9.00	9.40	0.355	0.370
D1	7.20		0.284	
E	9.70	9.90	0.382	0.390
E1	7.00		0.276	
e	2.54 BSC		0.100 BSC	
L	12.88	13.28	0.507	0.523
L1	3.00	-	0.118	-
L2	1.00	1.40	0.039	0.055

X008b TO-262 I²PAK

Weight = 1.5 g



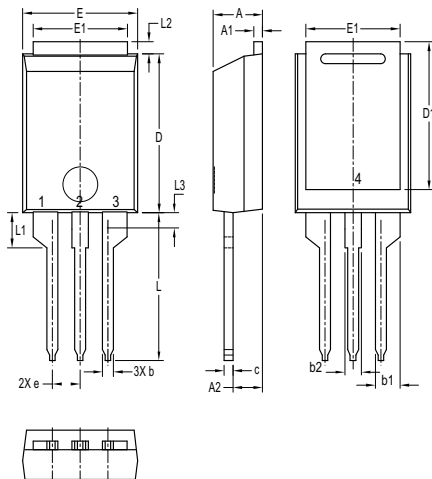
Dim.	Millimeters		Inches	
	min	max	min	max
A	4.06	4.83	0.160	0.190
A2	2.41		0.095	
b	0.51	0.99	0.020	0.039
b2	1.14	1.40	0.045	0.055
c	0.40	0.74	0.016	0.029
c2	1.14	1.40	0.045	0.055
D	8.38	9.40	0.330	0.370
D1	8.00	8.89	0.315	0.350
D2	2.5		0.098	
E	9.65	10.41	0.380	0.410
E1	6.22	8.50	0.245	0.335
e	2.54 BSC		0.100 BSC	
e1	4.28		0.169	
L	13.00	13.60	0.512	0.535
L1	2.90	3.10	0.114	0.122
L2	1.02	1.68	0.040	0.066

All dimensions conform with and/or within JEDEC standard

X009a PLUS220™

Weight = 2.5 g

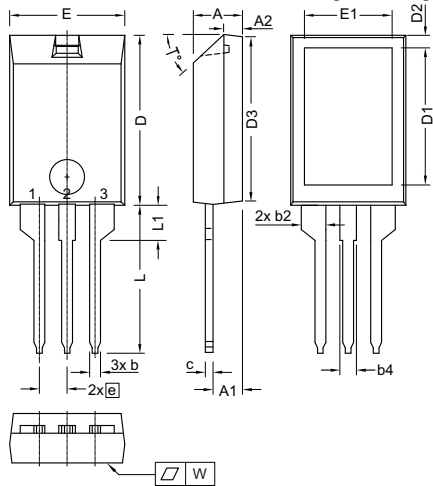
b) middle leg cut



Dim.	Millimeters		Inches	
	min	max	min	max
A	4.30	4.70	0.169	0.185
A1	0.70	0.90	0.028	0.035
A2	2.50	3.00	0.098	0.118
b	0.90	1.20	0.035	0.047
b1	2.03	2.41	0.080	0.095
b2	1.37	1.63	0.054	0.064
c	0.70	0.90	0.028	0.035
D	14.00	15.00	0.551	0.591
D1	13.00	13.70	0.512	0.539
E	10.00	11.00	0.394	0.433
E1	8.40	8.80	0.331	0.346
e	2.54 BSC		0.100 BSC	
L	13.00	14.00	0.512	0.551
L1	3.00	3.50	0.118	0.138
L2	0.90	1.30	0.035	0.051
L3	1.20	1.50	0.047	0.059

X010a ISOPLUS220™ AB

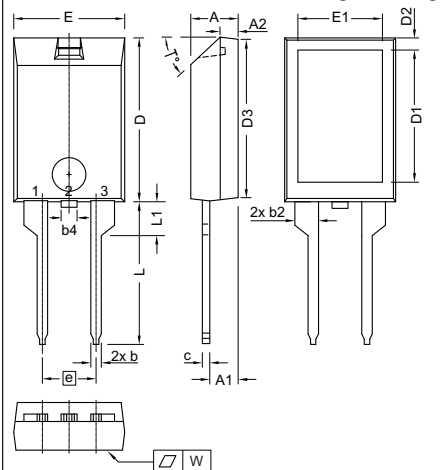
Weight = 2.5 g



Dim.	Millimeters		Inches	
	min	max	min	max
A	4.00	5.00	0.157	0.197
A1	2.50	3.00	0.098	0.118
A2	1.60	1.80	0.063	0.071
b	0.90	1.30	0.035	0.051
b2	2.35	2.55	0.093	0.100
b4	1.25	1.65	0.049	0.065
c	0.70	1.00	0.028	0.039
D	15.00	16.00	0.591	0.630
D1	12.00	13.00	0.472	0.512
D2	1.10	1.50	0.043	0.059
D3	14.90	15.50	0.587	0.610
E	10.00	11.00	0.394	0.433
E1	7.50	8.50	0.295	0.335
e	2.54 BSC		0.100 BSC	
L	13.00	14.50	0.512	0.571
L1	3.00	3.50	0.118	0.138
T°	42.5	47.5	-	-
W	-	0.10	-	0.004

X010b ISOPLUS220™ AC

Weight = 2.5 g



Dim.	Millimeters		Inches	
	min	max	min	max
A	4.00	5.00	0.157	0.197
A1	2.50	3.00	0.098	0.118
A2	1.60	1.80	0.063	0.071
b	0.90	1.30	0.035	0.051
b2	1.25	1.65	0.049	0.065
b4	2.35	2.55	0.093	0.100
c	0.70	1.00	0.028	0.039
D	15.00	16.00	0.591	0.630
D1	12.00	13.00	0.472	0.512
D2	1.10	1.50	0.043	0.059
D3	14.90	15.50	0.587	0.610
E	10.00	11.00	0.394	0.433
E1	7.50	8.50	0.295	0.335
e	5.08 BSC		0.200 BSC	
L	13.00	14.50	0.512	0.571
L1	3.00	3.50	0.118	0.138
T°	42.5	47.5	-	-
W	-	0.10	-	0.004

Dimensions in mm and inches (1 mm = 0.0394")

X011a TO-263 AA (D²PAK) Weight = 1.5 g

Dim.	Millimeter		Inches	
	min	max	min	max
A	4.06	4.83	0.160	0.190
A1	typ. 0.10		typ. 0.004	
b	0.51	0.99	0.020	0.039
b2	1.14	1.40	0.045	0.055
c	0.40	0.74	0.016	0.029
c2	1.14	1.40	0.045	0.055
D	8.38	9.40	0.330	0.370
D1	8.00	8.89	0.315	0.350
E	9.65	10.41	0.380	0.410
E1	6.22	8.13	0.245	0.320
e	2,54 BSC		0,100 BSC	
H	14.61	15.88	0.575	0.625
L	1.78	2.79	0.070	0.110
L1	1.02	1.68	0.040	0.066
W	typ. 0.02	0.040	typ. 0.0008	0.002

X011b TO-263 AB (D²PAK) Weight = 1.5 g

Dim.	Millimeter		Inches	
	min	max	min	max
A	4.06	4.83	0.160	0.190
A1	typ. 0.10		typ. 0.004	
b	0.51	0.99	0.020	0.039
b2	1.14	1.40	0.045	0.055
c	0.40	0.74	0.016	0.029
c2	1.14	1.40	0.045	0.055
D	8.38	9.40	0.330	0.370
D1	8.00	8.89	0.315	0.350
E	9.65	10.41	0.380	0.410
E1	6.22	8.13	0.245	0.320
e	2,54 BSC		0,100 BSC	
H	14.61	15.88	0.575	0.625
L	1.78	2.79	0.070	0.110
L1	1.02	1.68	0.040	0.066
W	typ. 0.02	0.040	typ. 0.0008	0.002

X011c TO-263 AB (D²PAK) Weight = ?? g

Dim.	Millimeters		Inches	
	min	max	min	max
A	4.06	4.83	0.160	0.190
A1	typ 0.10		typ 0.004	
A2	2.41		0.095	
b	0.51	0.99	0.020	0.039
b2	1.14	1.40	0.045	0.055
c	0.40	0.74	0.016	0.029
c2	1.14	1.40	0.045	0.055
D	8.38	9.40	0.330	0.370
D1	8.00	8.89	0.315	0.350
D2	2.5		0.098	
E	9.65	10.41	0.380	0.410
E1	6.22	8.50	0.245	0.335
e	2.54 BSC		0.100 BSC	
e1	4.28		0.169	
H	14.61	15.88	0.575	0.625
L	1.78	2.79	0.070	0.110
L2	1.02	1.68	0.040	0.066
W	typ 0.02	0.040	typ 0.0008	0.002

All dimensions conform with and/or within JEDEC standard

X012a TO-263 (5) Weight = 1.5 g

Dim.	Millimeter		Inches	
	min	max	min	max
A	4.20	4.80	0.160	0.190
A1	2.10	2.70	0.083	0.106
b	0.60	0.99	0.024	0.039
c	0.40	0.70	0.016	0.028
c2	1.20	1.40	0.047	0.055
D	8.80	9.50	0.346	0.374
D1	6.60	7.20	0.260	0.283
E	9.65	10.30	0.380	0.406
E1	7.50	8.20	0.295	0.323
e	1.70 BSC		0.067 BSC	
L	14.80	15.80	0.583	0.622
L1	2.24	2.84	0.088	0.112
L2	1.00	1.40	0.039	0.067
L3	1.20	1.70	0.047	0.067

X012b TO-263 (7) c) middle leg cut Weight = 2.5 g

Dim.	Millimeter		Inches	
	min	max	min	max
A	4.20	4.60	0.165	0.181
A1	2.45	2.75	0.096	0.108
b	0.65	0.90	0.026	0.035
c	0.40	0.60	0.016	0.024
c2	1.14	1.40	0.045	0.055
D	8.38	8.64	0.330	0.340
D1	6.10	6.35	0.240	0.250
E	10.00	10.30	0.394	0.406
E1	7.34	8.00	0.290	0.315
e	1.27 BSC		0.050 BSC	
L	14.73	15.75	0.580	0.620
L1	2.24	2.84	0.088	0.112
L2	1.35	1.55	0.053	0.061

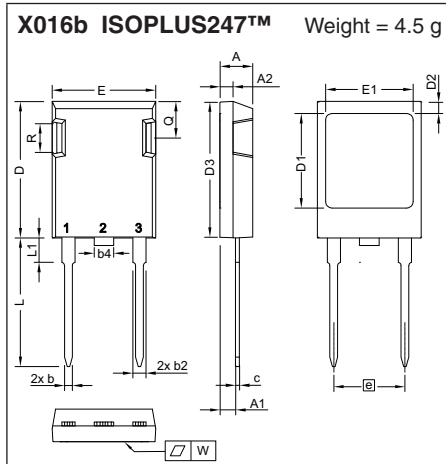
X013 PLUS220™ (SMD) Weight = 2 g

Dim.	Millimeter		Inches	
	min	max	min	max
A	4.30	4.70	0.169	0.185
A1	0.70	0.90	0.028	0.035
A2	2.50	3.00	0.098	0.118
A3	0.00	0.25	0.000	0.010
b	0.90	1.20	0.035	0.047
b1	2.03	2.41	0.080	0.095
b2	1.37	1.63	0.054	0.064
c	0.70	0.90	0.028	0.035
D	14.00	15.00	0.551	0.591
D1	13.00	13.70	0.512	0.539
E	10.00	11.00	0.394	0.433
E1	8.40	8.80	0.331	0.346
e	5.08 BSC		0.200 BSC	
L	5.30	5.80	0.209	0.228
L1	3.00	3.50	0.118	0.138
L2	0.90	1.30	0.035	0.051
L3	1.20	1.50	0.047	0.059
L4	1.00	1.50	0.039	0.059

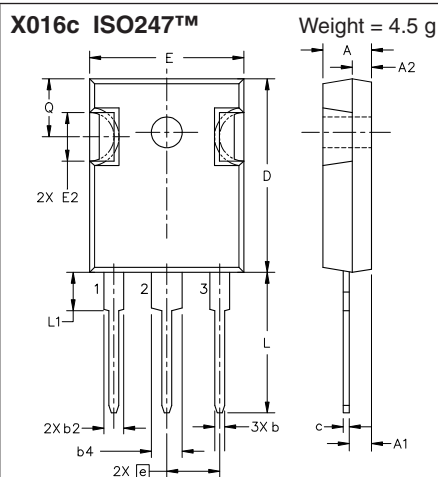
Dimensions in mm and inches (1 mm = 0.0394")

<p>X014a TO-247 AD Weight = 6 g</p> <table border="1"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Millimeter</th> <th colspan="2">Inches</th> </tr> <tr> <th>min</th> <th>max</th> <th>min</th> <th>max</th> </tr> </thead> <tbody> <tr><td>A</td><td>4.70</td><td>5.30</td><td>0.185</td><td>0.209</td></tr> <tr><td>A1</td><td>2.21</td><td>2.59</td><td>0.087</td><td>0.102</td></tr> <tr><td>A2</td><td>1.50</td><td>2.49</td><td>0.059</td><td>0.098</td></tr> <tr><td>b</td><td>0.99</td><td>1.40</td><td>0.039</td><td>0.055</td></tr> <tr><td>b2</td><td>1.65</td><td>2.39</td><td>0.065</td><td>0.094</td></tr> <tr><td>b4</td><td>2.59</td><td>3.43</td><td>0.102</td><td>0.135</td></tr> <tr><td>c</td><td>0.38</td><td>0.89</td><td>0.015</td><td>0.035</td></tr> <tr><td>D</td><td>20.79</td><td>21.45</td><td>0.819</td><td>0.845</td></tr> <tr><td>D1</td><td>13.07</td><td>-</td><td>0.515</td><td>-</td></tr> <tr><td>D2</td><td>0.51</td><td>1.35</td><td>0.020</td><td>0.053</td></tr> <tr><td>E</td><td>15.48</td><td>16.24</td><td>0.610</td><td>0.640</td></tr> <tr><td>E1</td><td>13.45</td><td>-</td><td>0.53</td><td>-</td></tr> <tr><td>E2</td><td>4.31</td><td>5.48</td><td>0.170</td><td>0.216</td></tr> <tr><td>e</td><td colspan="2">5.45 BSC</td><td colspan="2">0.215 BSC</td></tr> <tr><td>L</td><td>19.80</td><td>20.30</td><td>0.078</td><td>0.800</td></tr> <tr><td>L1</td><td>-</td><td>4.49</td><td>-</td><td>0.177</td></tr> <tr><td>Ø P</td><td>3.55</td><td>3.65</td><td>0.140</td><td>0.144</td></tr> <tr><td>Ø P1</td><td>-</td><td>7.39</td><td>-</td><td>0.290</td></tr> <tr><td>Q</td><td>5.38</td><td>6.19</td><td>0.212</td><td>0.244</td></tr> <tr><td>S</td><td colspan="2">6.14 BSC</td><td colspan="2">0.242 BSC</td></tr> </tbody> </table>	Dim.	Millimeter		Inches		min	max	min	max	A	4.70	5.30	0.185	0.209	A1	2.21	2.59	0.087	0.102	A2	1.50	2.49	0.059	0.098	b	0.99	1.40	0.039	0.055	b2	1.65	2.39	0.065	0.094	b4	2.59	3.43	0.102	0.135	c	0.38	0.89	0.015	0.035	D	20.79	21.45	0.819	0.845	D1	13.07	-	0.515	-	D2	0.51	1.35	0.020	0.053	E	15.48	16.24	0.610	0.640	E1	13.45	-	0.53	-	E2	4.31	5.48	0.170	0.216	e	5.45 BSC		0.215 BSC		L	19.80	20.30	0.078	0.800	L1	-	4.49	-	0.177	Ø P	3.55	3.65	0.140	0.144	Ø P1	-	7.39	-	0.290	Q	5.38	6.19	0.212	0.244	S	6.14 BSC		0.242 BSC		<p>X014b TO-247 AD Weight = 6 g</p> <table border="1"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Millimeter</th> <th colspan="2">Inches</th> </tr> <tr> <th>min</th> <th>max</th> <th>min</th> <th>max</th> </tr> </thead> <tbody> <tr><td>A</td><td>4.70</td><td>5.30</td><td>0.185</td><td>0.209</td></tr> <tr><td>A1</td><td>2.21</td><td>2.59</td><td>0.087</td><td>0.102</td></tr> <tr><td>A2</td><td>1.50</td><td>2.49</td><td>0.059</td><td>0.098</td></tr> <tr><td>b</td><td>0.99</td><td>1.40</td><td>0.039</td><td>0.055</td></tr> <tr><td>b2</td><td>1.65</td><td>2.39</td><td>0.065</td><td>0.094</td></tr> <tr><td>b4</td><td>2.59</td><td>3.43</td><td>0.102</td><td>0.135</td></tr> <tr><td>c</td><td>0.38</td><td>0.89</td><td>0.015</td><td>0.035</td></tr> <tr><td>D</td><td>20.79</td><td>21.45</td><td>0.819</td><td>0.845</td></tr> <tr><td>D1</td><td>13.07</td><td>-</td><td>0.515</td><td>-</td></tr> <tr><td>D2</td><td>0.51</td><td>1.35</td><td>0.020</td><td>0.053</td></tr> <tr><td>E</td><td>15.48</td><td>16.24</td><td>0.610</td><td>0.640</td></tr> <tr><td>E1</td><td>13.45</td><td>-</td><td>0.530</td><td>-</td></tr> <tr><td>E2</td><td>4.31</td><td>5.48</td><td>0.170</td><td>0.216</td></tr> <tr><td>e</td><td colspan="2">10.90 BSC</td><td colspan="2">0.430 BSC</td></tr> <tr><td>L</td><td>19.80</td><td>20.30</td><td>0.078</td><td>0.800</td></tr> <tr><td>L1</td><td>-</td><td>4.49</td><td>-</td><td>0.177</td></tr> <tr><td>Ø P</td><td>3.55</td><td>3.65</td><td>0.140</td><td>0.144</td></tr> <tr><td>Ø P1</td><td>-</td><td>7.39</td><td>-</td><td>0.290</td></tr> <tr><td>Q</td><td>5.38</td><td>6.19</td><td>0.212</td><td>0.244</td></tr> <tr><td>S</td><td colspan="2">6.14 BSC</td><td colspan="2">0.242 BSC</td></tr> </tbody> </table>	Dim.	Millimeter		Inches		min	max	min	max	A	4.70	5.30	0.185	0.209	A1	2.21	2.59	0.087	0.102	A2	1.50	2.49	0.059	0.098	b	0.99	1.40	0.039	0.055	b2	1.65	2.39	0.065	0.094	b4	2.59	3.43	0.102	0.135	c	0.38	0.89	0.015	0.035	D	20.79	21.45	0.819	0.845	D1	13.07	-	0.515	-	D2	0.51	1.35	0.020	0.053	E	15.48	16.24	0.610	0.640	E1	13.45	-	0.530	-	E2	4.31	5.48	0.170	0.216	e	10.90 BSC		0.430 BSC		L	19.80	20.30	0.078	0.800	L1	-	4.49	-	0.177	Ø P	3.55	3.65	0.140	0.144	Ø P1	-	7.39	-	0.290	Q	5.38	6.19	0.212	0.244	S	6.14 BSC		0.242 BSC		<p>X014c TO-247 AD Weight = 6 g</p> <table border="1"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Millimeter</th> <th colspan="2">Inches</th> </tr> <tr> <th>min</th> <th>max</th> <th>min</th> <th>max</th> </tr> </thead> <tbody> <tr><td>A</td><td>4.90</td><td>5.10</td><td>0.193</td><td>0.201</td></tr> <tr><td>A1</td><td>2.90</td><td>3.10</td><td>0.114</td><td>0.122</td></tr> <tr><td>A2</td><td>1.90</td><td>2.10</td><td>0.075</td><td>0.083</td></tr> <tr><td>A3</td><td>0.90</td><td>1.10</td><td>0.035</td><td>0.043</td></tr> <tr><td>b</td><td>1.35</td><td>1.50</td><td>0.053</td><td>0.059</td></tr> <tr><td>b1</td><td>1.90</td><td>2.10</td><td>0.075</td><td>0.083</td></tr> <tr><td>c</td><td>0.55</td><td>0.75</td><td>0.022</td><td>0.030</td></tr> <tr><td>D</td><td>20.80</td><td>21.40</td><td>0.819</td><td>0.843</td></tr> <tr><td>D1</td><td>16.20</td><td>16.40</td><td>0.638</td><td>0.646</td></tr> <tr><td>D2</td><td>3.40</td><td>3.70</td><td>0.134</td><td>0.146</td></tr> <tr><td>D3</td><td>1.40</td><td>1.60</td><td>0.055</td><td>0.063</td></tr> <tr><td>E</td><td>15.80</td><td>16.20</td><td>0.622</td><td>0.638</td></tr> <tr><td>E1</td><td>13.20</td><td>13.40</td><td>0.520</td><td>0.528</td></tr> <tr><td>E2</td><td>3.00</td><td>3.20</td><td>0.118</td><td>0.126</td></tr> <tr><td>E3</td><td>1.30</td><td>1.50</td><td>0.051</td><td>0.059</td></tr> <tr><td>e</td><td colspan="2">2.54 BSC</td><td colspan="2">0.100 BSC</td></tr> <tr><td>e1</td><td colspan="2">7.62 BSC</td><td colspan="2">0.300 BSC</td></tr> <tr><td>L</td><td>18.60</td><td>19.00</td><td>0.732</td><td>0.748</td></tr> <tr><td>L1</td><td>2.70</td><td>3.00</td><td>0.106</td><td>0.118</td></tr> <tr><td>Ø P</td><td>3.50</td><td>3.60</td><td>0.138</td><td>0.142</td></tr> <tr><td>Ø P1</td><td>6.90</td><td>7.10</td><td>0.272</td><td>0.280</td></tr> <tr><td>Q</td><td>5.50</td><td>5.70</td><td>0.216</td><td>0.224</td></tr> <tr><td>R</td><td>4.20</td><td>4.30</td><td>0.165</td><td>0.169</td></tr> <tr><td>S</td><td>6.10</td><td>6.30</td><td>0.240</td><td>0.248</td></tr> </tbody> </table>	Dim.	Millimeter		Inches		min	max	min	max	A	4.90	5.10	0.193	0.201	A1	2.90	3.10	0.114	0.122	A2	1.90	2.10	0.075	0.083	A3	0.90	1.10	0.035	0.043	b	1.35	1.50	0.053	0.059	b1	1.90	2.10	0.075	0.083	c	0.55	0.75	0.022	0.030	D	20.80	21.40	0.819	0.843	D1	16.20	16.40	0.638	0.646	D2	3.40	3.70	0.134	0.146	D3	1.40	1.60	0.055	0.063	E	15.80	16.20	0.622	0.638	E1	13.20	13.40	0.520	0.528	E2	3.00	3.20	0.118	0.126	E3	1.30	1.50	0.051	0.059	e	2.54 BSC		0.100 BSC		e1	7.62 BSC		0.300 BSC		L	18.60	19.00	0.732	0.748	L1	2.70	3.00	0.106	0.118	Ø P	3.50	3.60	0.138	0.142	Ø P1	6.90	7.10	0.272	0.280	Q	5.50	5.70	0.216	0.224	R	4.20	4.30	0.165	0.169	S	6.10	6.30	0.240	0.248
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L	18.60	19.00	0.732	0.748																																																																																																																																																																																																																																																																																																																																																									
L1	2.70	3.00	0.106	0.118																																																																																																																																																																																																																																																																																																																																																									
Ø P	3.50	3.60	0.138	0.142																																																																																																																																																																																																																																																																																																																																																									
Ø P1	6.90	7.10	0.272	0.280																																																																																																																																																																																																																																																																																																																																																									
Q	5.50	5.70	0.216	0.224																																																																																																																																																																																																																																																																																																																																																									
R	4.20	4.30	0.165	0.169																																																																																																																																																																																																																																																																																																																																																									
S	6.10	6.30	0.240	0.248																																																																																																																																																																																																																																																																																																																																																									
<p>X015a PLUS247™ Weight = 7 g</p> <table border="1"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Millimeter</th> <th colspan="2">Inches</th> </tr> <tr> <th>min</th> <th>max</th> <th>min</th> <th>max</th> </tr> </thead> <tbody> <tr><td>A</td><td>4.83</td><td>5.21</td><td>0.190</td><td>0.205</td></tr> <tr><td>A1</td><td>2.29</td><td>2.54</td><td>0.090</td><td>0.100</td></tr> <tr><td>A2</td><td>1.91</td><td>2.16</td><td>0.075</td><td>0.085</td></tr> <tr><td>b</td><td>1.14</td><td>1.40</td><td>0.045</td><td>0.055</td></tr> <tr><td>b1</td><td>1.90</td><td>2.10</td><td>0.075</td><td>0.084</td></tr> <tr><td>b2</td><td>2.92</td><td>3.12</td><td>0.115</td><td>0.123</td></tr> <tr><td>C</td><td>0.60</td><td>0.80</td><td>0.024</td><td>0.031</td></tr> <tr><td>D</td><td>20.80</td><td>21.34</td><td>0.819</td><td>0.840</td></tr> <tr><td>E</td><td>15.75</td><td>16.13</td><td>0.620</td><td>0.635</td></tr> <tr><td>e</td><td colspan="2">5.45 BSC</td><td colspan="2">0.215 BSC</td></tr> <tr><td>L</td><td>19.80</td><td>20.30</td><td>0.078</td><td>0.800</td></tr> <tr><td>L1</td><td>3.80</td><td>4.30</td><td>0.150</td><td>0.170</td></tr> <tr><td>Q</td><td>5.60</td><td>6.20</td><td>0.220</td><td>0.244</td></tr> <tr><td>R</td><td>4.32</td><td>4.83</td><td>0.170</td><td>0.190</td></tr> </tbody> </table>	Dim.	Millimeter		Inches		min	max	min	max	A	4.83	5.21	0.190	0.205	A1	2.29	2.54	0.090	0.100	A2	1.91	2.16	0.075	0.085	b	1.14	1.40	0.045	0.055	b1	1.90	2.10	0.075	0.084	b2	2.92	3.12	0.115	0.123	C	0.60	0.80	0.024	0.031	D	20.80	21.34	0.819	0.840	E	15.75	16.13	0.620	0.635	e	5.45 BSC		0.215 BSC		L	19.80	20.30	0.078	0.800	L1	3.80	4.30	0.150	0.170	Q	5.60	6.20	0.220	0.244	R	4.32	4.83	0.170	0.190	<p>X015c PLUS247™ Weight = 7 g</p> <table border="1"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Millimeter</th> <th colspan="2">Inches</th> </tr> <tr> <th>min</th> <th>max</th> <th>min</th> <th>max</th> </tr> </thead> <tbody> <tr><td>A</td><td>4.90</td><td>5.10</td><td>0.193</td><td>0.201</td></tr> <tr><td>A1</td><td>2.90</td><td>3.10</td><td>0.114</td><td>0.122</td></tr> <tr><td>A2</td><td>1.90</td><td>2.10</td><td>0.075</td><td>0.083</td></tr> <tr><td>A3</td><td>0.90</td><td>1.10</td><td>0.035</td><td>0.043</td></tr> <tr><td>b</td><td>1.35</td><td>1.50</td><td>0.053</td><td>0.059</td></tr> <tr><td>b1</td><td>1.90</td><td>2.10</td><td>0.075</td><td>0.083</td></tr> <tr><td>c</td><td>0.55</td><td>0.75</td><td>0.022</td><td>0.030</td></tr> <tr><td>D</td><td>20.80</td><td>21.40</td><td>0.819</td><td>0.843</td></tr> <tr><td>D1</td><td>16.20</td><td>16.40</td><td>0.638</td><td>0.646</td></tr> <tr><td>D2</td><td>3.40</td><td>3.70</td><td>0.134</td><td>0.146</td></tr> <tr><td>D3</td><td>1.40</td><td>1.60</td><td>0.055</td><td>0.063</td></tr> <tr><td>E</td><td>15.80</td><td>16.20</td><td>0.622</td><td>0.638</td></tr> <tr><td>E1</td><td>13.20</td><td>13.40</td><td>0.520</td><td>0.528</td></tr> <tr><td>E2</td><td>3.00</td><td>3.20</td><td>0.118</td><td>0.126</td></tr> <tr><td>E3</td><td>1.30</td><td>1.50</td><td>0.051</td><td>0.059</td></tr> <tr><td>e</td><td colspan="2">2.54 BSC</td><td colspan="2">0.100 BSC</td></tr> <tr><td>e1</td><td colspan="2">7.62 BSC</td><td colspan="2">0.300 BSC</td></tr> <tr><td>L</td><td>18.60</td><td>19.00</td><td>0.732</td><td>0.748</td></tr> <tr><td>L1</td><td>2.70</td><td>3.00</td><td>0.106</td><td>0.118</td></tr> <tr><td>Q</td><td>5.50</td><td>5.70</td><td>0.216</td><td>0.224</td></tr> <tr><td>R</td><td>4.20</td><td>4.30</td><td>0.165</td><td>0.169</td></tr> </tbody> </table>	Dim.	Millimeter		Inches		min	max	min	max	A	4.90	5.10	0.193	0.201	A1	2.90	3.10	0.114	0.122	A2	1.90	2.10	0.075	0.083	A3	0.90	1.10	0.035	0.043	b	1.35	1.50	0.053	0.059	b1	1.90	2.10	0.075	0.083	c	0.55	0.75	0.022	0.030	D	20.80	21.40	0.819	0.843	D1	16.20	16.40	0.638	0.646	D2	3.40	3.70	0.134	0.146	D3	1.40	1.60	0.055	0.063	E	15.80	16.20	0.622	0.638	E1	13.20	13.40	0.520	0.528	E2	3.00	3.20	0.118	0.126	E3	1.30	1.50	0.051	0.059	e	2.54 BSC		0.100 BSC		e1	7.62 BSC		0.300 BSC		L	18.60	19.00	0.732	0.748	L1	2.70	3.00	0.106	0.118	Q	5.50	5.70	0.216	0.224	R	4.20	4.30	0.165	0.169	<p>X016a ISOPLUS247™ Weight = 4.5 g</p> <table border="1"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Millimeter</th> <th colspan="2">Inches</th> </tr> <tr> <th>min</th> <th>max</th> <th>min</th> <th>max</th> </tr> </thead> <tbody> <tr><td>A</td><td>4.83</td><td>5.21</td><td>0.190</td><td>0.205</td></tr> <tr><td>A1</td><td>2.29</td><td>2.54</td><td>0.090</td><td>0.100</td></tr> <tr><td>A2</td><td>1.91</td><td>2.16</td><td>0.075</td><td>0.085</td></tr> <tr><td>b</td><td>1.14</td><td>1.40</td><td>0.045</td><td>0.055</td></tr> <tr><td>b2</td><td>1.91</td><td>2.20</td><td>0.075</td><td>0.087</td></tr> <tr><td>b4</td><td>2.92</td><td>3.24</td><td>0.115</td><td>0.128</td></tr> <tr><td>c</td><td>0.61</td><td>0.83</td><td>0.024</td><td>0.033</td></tr> <tr><td>D</td><td>20.80</td><td>21.34</td><td>0.819</td><td>0.840</td></tr> <tr><td>D1</td><td>15.75</td><td>16.26</td><td>0.620</td><td>0.640</td></tr> <tr><td>D2</td><td>1.65</td><td>2.15</td><td>0.065</td><td>0.085</td></tr> <tr><td>D3</td><td>20.30</td><td>20.70</td><td>0.799</td><td>0.815</td></tr> <tr><td>E</td><td>15.75</td><td>16.13</td><td>0.620</td><td>0.635</td></tr> <tr><td>E1</td><td>13.21</td><td>13.72</td><td>0.520</td><td>0.540</td></tr> <tr><td>e</td><td colspan="2">5.45 BSC</td><td colspan="2">0.215 BSC</td></tr> <tr><td>L</td><td>19.81</td><td>20.60</td><td>0.780</td><td>0.811</td></tr> <tr><td>L1</td><td>3.81</td><td>4.38</td><td>0.150</td><td>0.172</td></tr> <tr><td>Q</td><td>5.59</td><td>6.20</td><td>0.220</td><td>0.244</td></tr> <tr><td>R</td><td>4.25</td><td>5.50</td><td>0.167</td><td>0.217</td></tr> <tr><td>W</td><td>-</td><td>0.10</td><td>-</td><td>0.004</td></tr> </tbody> </table>	Dim.	Millimeter		Inches		min	max	min	max	A	4.83	5.21	0.190	0.205	A1	2.29	2.54	0.090	0.100	A2	1.91	2.16	0.075	0.085	b	1.14	1.40	0.045	0.055	b2	1.91	2.20	0.075	0.087	b4	2.92	3.24	0.115	0.128	c	0.61	0.83	0.024	0.033	D	20.80	21.34	0.819	0.840	D1	15.75	16.26	0.620	0.640	D2	1.65	2.15	0.065	0.085	D3	20.30	20.70	0.799	0.815	E	15.75	16.13	0.620	0.635	E1	13.21	13.72	0.520	0.540	e	5.45 BSC		0.215 BSC		L	19.81	20.60	0.780	0.811	L1	3.81	4.38	0.150	0.172	Q	5.59	6.20	0.220	0.244	R	4.25	5.50	0.167	0.217	W	-	0.10	-	0.004																																																		
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R	4.32	4.83	0.170	0.190																																																																																																																																																																																																																																																																																																																																																									
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A1	2.90	3.10	0.114	0.122																																																																																																																																																																																																																																																																																																																																																									
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D1	16.20	16.40	0.638	0.646																																																																																																																																																																																																																																																																																																																																																									
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E3	1.30	1.50	0.051	0.059																																																																																																																																																																																																																																																																																																																																																									
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L1	2.70	3.00	0.106	0.118																																																																																																																																																																																																																																																																																																																																																									
Q	5.50	5.70	0.216	0.224																																																																																																																																																																																																																																																																																																																																																									
R	4.20	4.30	0.165	0.169																																																																																																																																																																																																																																																																																																																																																									
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b4	2.92	3.24	0.115	0.128																																																																																																																																																																																																																																																																																																																																																									
c	0.61	0.83	0.024	0.033																																																																																																																																																																																																																																																																																																																																																									
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D1	15.75	16.26	0.620	0.640																																																																																																																																																																																																																																																																																																																																																									
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E1	13.21	13.72	0.520	0.540																																																																																																																																																																																																																																																																																																																																																									
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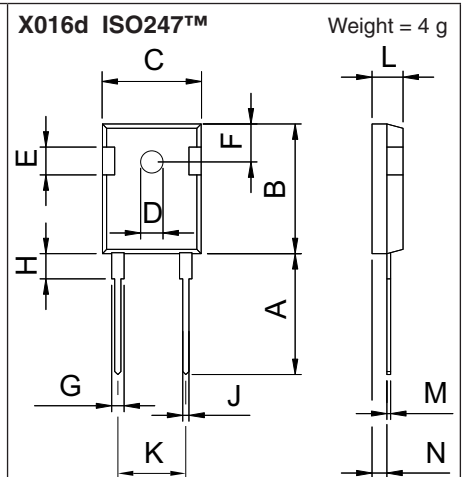
Dimensions in mm and inches (1 mm = 0.0394")



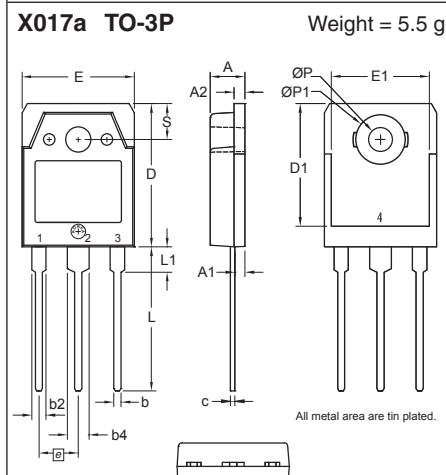
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.29	2.54	0.090	0.100
A2	1.91	2.16	0.075	0.085
b	1.14	1.40	0.045	0.055
b2	1.91	2.20	0.075	0.087
b4	2.92	3.24	0.115	0.128
c	0.61	0.83	0.024	0.033
D	20.80	21.34	0.819	0.840
D1	15.75	16.26	0.620	0.640
D2	1.65	2.15	0.065	0.085
D3	20.30	20.70	0.799	0.815
E	15.75	16.13	0.620	0.635
E1	13.21	13.72	0.520	0.540
e	10.90 BSC		0.430 BSC	
L	19.81	20.60	0.780	0.811
L1	3.81	4.38	0.150	0.172
Q	5.59	6.20	0.220	0.244
R	4.25	5.50	0.167	0.217
W	-	0.10	-	0.004



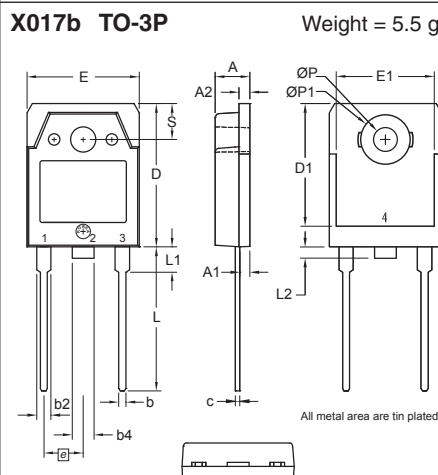
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.70	5.30	0.185	0.209
A1	2.21	2.59	0.087	0.102
A2	1.50	2.49	0.059	0.098
b	0.99	1.40	0.039	0.055
b2	1.65	2.39	0.065	0.094
b4	2.59	3.43	0.102	0.135
c	0.38	0.89	0.015	0.035
D	20.79	21.45	0.819	0.844
E	15.49	16.24	0.610	0.639
E2	4.31	5.48	0.170	0.216
e	5.46 BSC		0.215 BSC	
L	19.80	20.30	0.780	0.799
L1	-	4.49	-	0.177
Ø P	3.55	3.65	0.140	0.144
Q	5.38	6.19	0.212	0.244



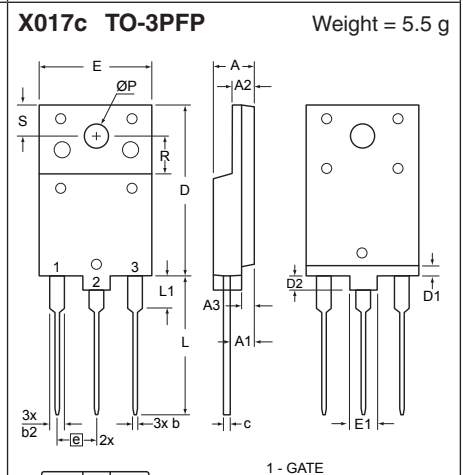
Dim.	Millimeter		Inches	
	min	max	min	max
A	19.81	20.32	0.780	0.800
B	20.80	21.46	0.819	0.845
C	15.75	16.26	0.610	0.640
D	3.55	3.65	0.140	0.144
E	4.32	5.49	0.170	0.216
F	5.40	6.20	0.212	0.244
G	1.65	2.13	0.065	0.084
H	-	4.50	-	0.177
J	1.00	1.40	0.040	0.055
K	10.80	11.00	0.426	0.433
L	4.70	5.30	0.185	0.209
M	0.40	0.80	0.016	0.031
N	1.50	2.49	0.087	0.102



Dim.	Millimeter		Inches	
	min	max	min	max
A	4.70	4.90	0.185	0.193
A1	1.30	1.50	0.051	0.059
A2	1.45	1.65	0.057	0.065
b	0.90	1.15	0.035	0.045
b2	1.90	2.20	0.075	0.087
b4	2.90	3.20	0.114	0.126
c	0.55	0.80	0.022	0.031
D	19.80	20.10	0.780	0.791
D1	16.90	17.20	0.665	0.677
E	15.50	15.80	0.610	0.622
E1	13.50	13.70	0.531	0.539
e	5.45 BSC		0.215 BSC	
L	19.80	20.20	0.780	0.795
L1	3.40	3.60	0.134	0.142
Ø P	3.20	3.40	0.126	0.134
ØP1	6.90	7.10	0.272	0.280
S	4.90	5.10	0.193	0.201



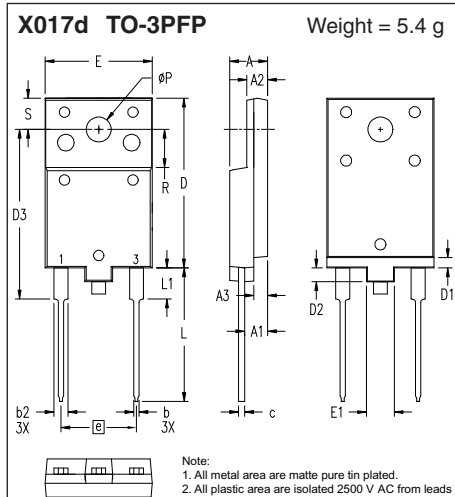
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.70	4.90	0.185	0.193
A1	1.30	1.50	0.051	0.059
A2	1.45	1.65	0.057	0.065
b	0.90	1.15	0.035	0.045
b2	1.90	2.20	0.075	0.087
b4	2.90	3.20	0.114	0.126
c	0.55	0.80	0.022	0.031
D	19.80	20.10	0.780	0.791
D1	16.90	17.20	0.665	0.677
E	15.50	15.80	0.610	0.622
E1	13.50	13.70	0.531	0.539
e	5.45 BSC		0.215 BSC	
L	19.80	20.20	0.780	0.795
L1	3.40	3.60	0.134	0.142
L2	0.00	1.40	0.000	0.055
Ø P	3.20	3.40	0.126	0.134
ØP1	6.90	7.10	0.272	0.280
S	4.90	5.10	0.193	0.201



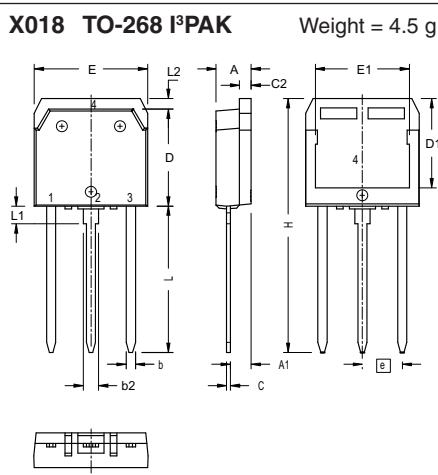
Dim.	Millimeter		Inches	
	min	max	min	max
A	5.40	5.80	0.213	0.228
A1	3.10	3.50	0.122	0.138
A2	2.90	3.30	0.114	0.130
A3	1.90	2.30	0.075	0.091
b	0.65	0.95	0.026	0.037
b2	1.90	2.30	0.075	0.091
c	0.80	1.10	0.031	0.043
D	24.30	24.70	0.957	0.972
D1	1.30	1.70	0.051	0.067
D2	1.80	2.2	0.071	0.087
E	15.40	15.80	0.606	0.622
E1	3.90	4.30	0.154	0.169
e	5.45 BSC		0.215 BSC	
L	19.00	19.50	0.748	0.768
L1	4.30	4.70	0.169	0.185
Ø P	3.40	3.80	0.134	0.150
R	5.30	5.70	0.209	0.224
S	4.30	4.70	0.169	0.185

1 - GATE
2 - DRAIN (COLLECTOR)
3 - SOURCE (EMITTER)

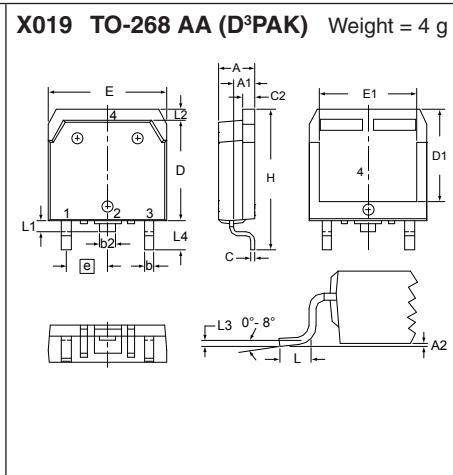
Dimensions in mm and inches (1 mm = 0.0394")



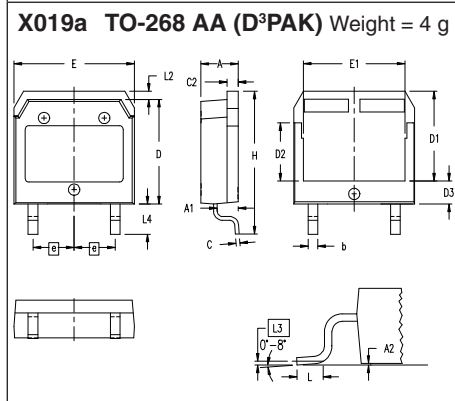
Dim.	Millimeter		Inches	
	min	max	min	max
A	5.40	5.80	0.213	0.228
A1	3.10	3.50	0.122	0.138
A2	2.90	3.30	0.114	0.130
A3	1.90	2.30	0.075	0.091
b	0.65	0.95	0.026	0.037
b2	1.90	2.30	0.075	0.091
c	0.80	1.10	0.031	0.043
D	24.30	24.70	0.957	0.972
D1	1.30	1.70	0.051	0.067
D2	1.80	2.2	0.071	0.087
E	15.40	15.80	0.606	0.622
E1	3.90	4.30	0.154	0.169
e	10.9 BSC		0.430 BSC	
L	19.00	19.50	0.748	0.768
L1	4.30	4.70	0.169	0.185
ØP	3.40	3.80	0.134	0.150
R	5.30	5.70	0.209	0.224
S	4.30	4.70	0.169	0.185



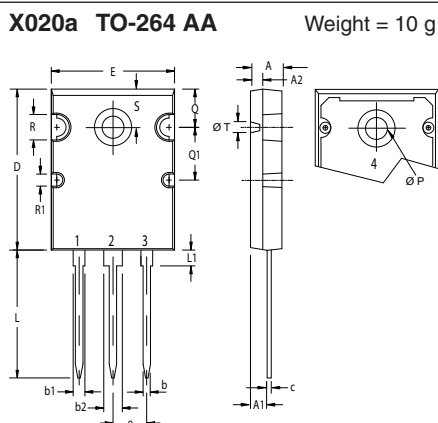
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.90	5.10	0.193	0.201
A1	2.70	2.90	0.106	0.114
b	1.15	1.45	0.045	0.057
b2	1.90	2.10	0.075	0.083
C	0.40	0.65	0.016	0.026
C 2	1.45	1.60	0.057	0.063
D	13.80	14.00	0.543	0.551
D1	12.40	12.70	0.488	0.500
E	15.85	16.05	0.624	0.632
E1	13.30	13.60	0.524	0.535
e	5.45 BSC		0.215 BSC	
H	34.67	35.43	1.365	1.395
L	19.81	20.32	0.780	0.800
L1	2.00	2.30	0.079	0.091
L2	1.00	1.15	0.039	0.045



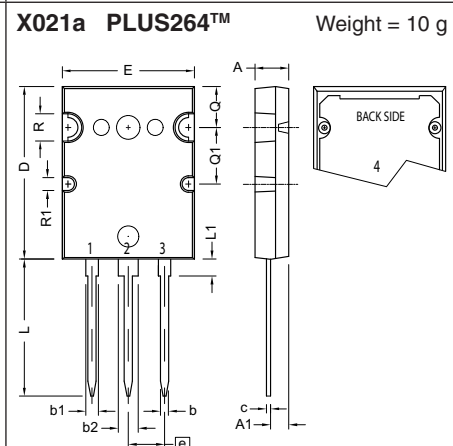
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.90	5.10	0.193	0.201
A1	2.70	2.90	0.106	0.114
A2	0.02	0.25	0.001	0.100
b	1.15	1.45	0.045	0.057
b2	1.90	2.10	0.075	0.083
C	0.40	0.65	0.016	0.026
C 2	1.45	1.60	0.057	0.063
D	13.80	14.00	0.543	0.551
D1	12.40	12.70	0.488	0.500
E	15.85	16.05	0.624	0.632
E1	13.30	13.60	0.524	0.535
e	5.45 BSC		0.215 BSC	
H	18.70	19.10	0.736	0.752
L	2.40	2.70	0.094	0.106
L1	1.20	1.40	0.047	0.055
L2	1.00	1.15	0.039	0.045
L3	2.54 BSC		0.100 BSC	
L4	3.80	4.10	0.150	0.161



Dim.	Millimeter		Inches	
	min	max	min	max
A	4.90	5.10	0.193	0.201
A1	2.70	2.90	0.106	0.114
A2	0.02	0.25	0.001	0.100
b	1.15	1.45	0.045	0.057
C	0.40	0.65	0.016	0.026
C 2	1.45	1.60	0.057	0.063
D	13.80	14.00	0.543	0.551
D1	11.80	12.10	0.465	0.476
D2	7.50	7.80	0.295	0.307
D3	2.90	3.20	0.114	0.126
E	15.85	16.05	0.624	0.632
E1	13.30	13.60	0.524	0.535
e	5.45 BSC		0.215 BSC	
H	18.70	19.10	0.736	0.752
L	1.70	2.00	0.067	0.079
L2	1.00	1.15	0.039	0.045
L3	0.25 BSC		0.010 BSC	
L4	3.80	4.10	0.150	0.161

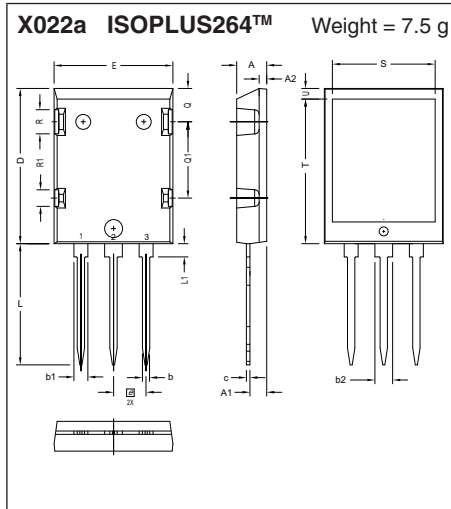


Dim.	Millimeter		Inches	
	min	max	min	max
A	4.82	5.13	0.190	0.202
A1	2.54	2.89	0.100	0.114
A2	2.00	2.10	0.079	0.083
b	1.12	1.42	0.044	0.056
b2	2.90	3.09	0.114	0.122
c	0.53	0.83	0.021	0.033
D	25.91	26.16	1.020	1.030
E	19.81	19.96	0.780	0.786
e	5.45 BSC		0.215 BSC	
J	0.00	0.25	0.000	0.010
K	0.00	0.25	0.000	0.010
L	20.32	20.83	0.800	0.820
L1	2.29	2.59	0.090	0.102
P	3.17	2.66	0.125	0.144
Q	6.07	6.27	0.239	0.247
Q1	8.38	8.69	0.330	0.342
R	3.81	4.32	0.150	0.170
R1	1.78	2.29	0.070	0.090
S	6.04	6.30	0.238	0.248
T	1.57	1.83	0.062	0.072

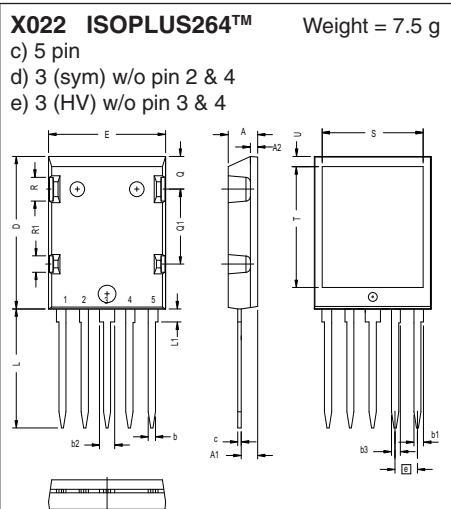


Dim.	Millimeter		Inches	
	min	max	min	max
A	4.70	5.31	0.185	0.209
A1	2.59	3.00	0.102	0.118
b	0.94	1.40	0.037	0.055
b1	2.21	2.59	0.087	0.102
b2	2.79	3.20	0.110	0.126
c	0.43	0.74	0.017	0.029
D	25.58	26.59	1.007	1.047
E	19.30	20.29	0.760	0.799
e	5.45 BSC		0.215 BSC	
L	19.79	21.39	0.779	0.842
L1	2.21	2.59	0.087	0.102
Q	6.10	6.50	0.240	0.256
Q1	8.38	8.79	0.330	0.346
ØR	3.94	4.75	0.155	0.187
ØR1	2.16	2.36	0.085	0.093

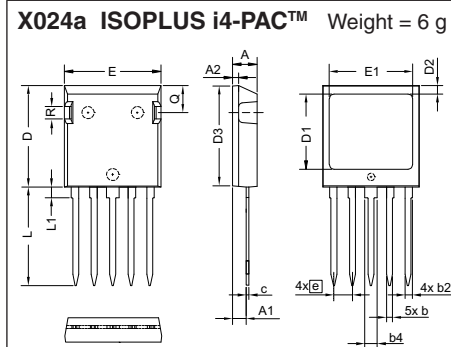
Dimensions in mm and inches (1 mm = 0.0394")



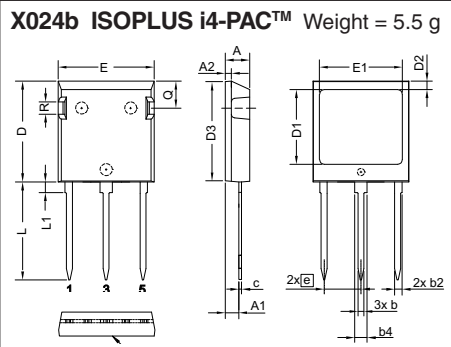
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	1.40	0.046	0.055
b	1.14	1.40	0.045	0.055
b1	1.60	1.83	0.063	0.072
b2	2.54	2.79	0.100	0.110
b3	1.47	1.73	0.058	0.068
c	0.51	0.74	0.020	0.029
D	25.91	26.42	1.020	1.040
E	19.56	20.29	0.770	0.799
e	3.81 BSC		0.150 BSC	
L	19.81	21.83	0.780	0.820
L1	2.03	2.59	0.080	0.102
Q	5.33	5.97	0.210	0.235
Q1	12.45	13.03	0.490	0.513
R	3.81	4.57	0.150	0.180
R1	2.54	3.30	0.100	0.130
S	16.97	17.53	0.668	0.690
T	20.34	20.85	0.801	0.821
U	1.65	2.03	0.065	0.080



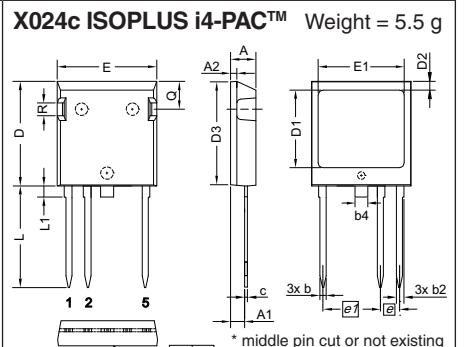
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	1.40	0.046	0.055
b	1.14	1.40	0.045	0.055
b1	1.60	1.83	0.063	0.072
b2	2.54	2.79	0.100	0.110
b3	1.47	1.73	0.058	0.068
c	0.51	0.74	0.020	0.029
D	25.91	26.42	1.020	1.040
E	19.56	20.29	0.770	0.799
e	3.81 BSC		0.150 BSC	
L	19.81	21.83	0.780	0.820
L1	2.03	2.59	0.080	0.102
Q	5.33	5.97	0.210	0.235
Q1	12.45	13.03	0.490	0.513
R	3.81	4.57	0.150	0.180
R1	2.54	3.30	0.100	0.130
S	16.97	17.53	0.668	0.690
T	20.34	20.85	0.801	0.821
U	1.65	2.03	0.065	0.080



Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	2.16	0.046	0.085
b	1.14	1.40	0.045	0.055
b2	1.47	1.73	0.058	0.068
b4	2.54	2.79	0.100	0.110
c	0.51	0.74	0.020	0.029
D	20.80	21.34	0.819	0.840
D1	14.99	15.75	0.590	0.620
D2	1.65	2.03	0.065	0.080
D3	20.30	20.70	0.799	0.815
E	19.56	20.29	0.770	0.799
E1	16.76	17.53	0.660	0.690
e	3.81 BSC		0.150 BSC	
L	19.81	21.34	0.780	0.840
L1	2.11	2.59	0.083	0.102
Q	5.33	6.20	0.210	0.244
R	2.54	4.57	0.100	0.180
W	-	0.10	-	0.004



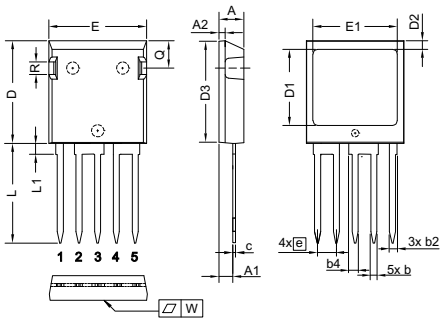
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	2.16	0.046	0.085
b	1.14	1.40	0.045	0.055
b2	1.47	1.73	0.058	0.068
b4	2.54	2.79	0.100	0.110
c	0.51	0.74	0.020	0.029
D	20.80	21.34	0.819	0.840
D1	14.99	15.75	0.590	0.620
D2	1.65	2.03	0.065	0.080
D3	20.30	20.70	0.799	0.815
E	19.56	20.29	0.770	0.799
E1	16.76	17.53	0.660	0.690
e	7.62 BSC		0.300 BSC	
L	19.81	21.34	0.780	0.840
L1	2.11	2.59	0.083	0.102
Q	5.33	6.20	0.210	0.244
R	2.54	4.57	0.100	0.180
W	-	0.10	-	0.004



Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	2.16	0.046	0.085
b	1.14	1.40	0.045	0.055
b2	1.47	1.73	0.058	0.068
b4*	2.54	2.79	0.100	0.110
c	0.51	0.74	0.020	0.029
D	20.80	21.34	0.819	0.840
D1	14.99	15.75	0.590	0.620
D2	1.65	2.03	0.065	0.080
D3	20.30	20.70	0.799	0.815
E	19.56	20.29	0.770	0.799
E1	16.76	17.53	0.660	0.690
e	3.81 BSC		0.150 BSC	
e1	11.43 BSC		0.450 BSC	
L	19.81	21.34	0.780	0.840
L1	2.11	2.59	0.083	0.102
Q	5.33	6.20	0.210	0.244
R	2.54	4.57	0.100	0.180
W	-	0.10	-	0.004

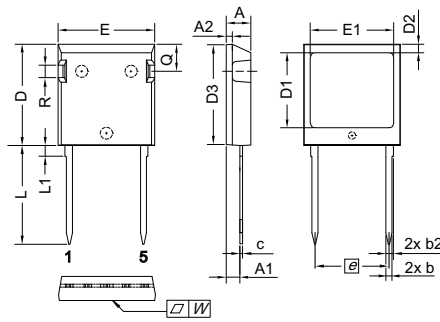
Dimensions in mm and inches (1 mm = 0.0394")

X024d ISOPLUS i4-PAC™ Weight = 6 g



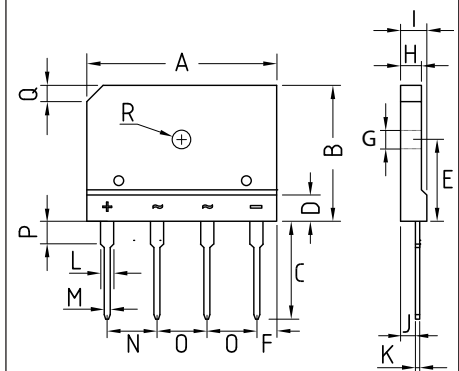
Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	2.16	0.046	0.085
b	1.14	1.40	0.045	0.055
b2	1.47	1.73	0.058	0.068
c	0.51	0.74	0.020	0.029
D	20.80	21.34	0.819	0.840
D1	14.99	15.75	0.590	0.620
D2	1.65	2.03	0.065	0.080
D3	20.30	20.70	0.799	0.815
E	19.56	20.29	0.770	0.799
E1	16.76	17.53	0.660	0.690
e	3.81 BSC		0.150 BSC	
L	19.81	21.34	0.780	0.840
L1	2.11	2.59	0.083	0.102
Q	5.33	6.20	0.210	0.244
R	2.54	4.57	0.100	0.180
W	-	0.10	-	0.004

X024e ISOPLUS i4-PAC™ Weight = 6 g



Dim.	Millimeter		Inches	
	min	max	min	max
A	4.83	5.21	0.190	0.205
A1	2.59	3.00	0.102	0.118
A2	1.17	2.16	0.046	0.085
b	1.14	1.40	0.045	0.055
b2	1.47	1.73	0.058	0.068
c	0.51	0.74	0.020	0.029
D	20.80	21.34	0.819	0.840
D1	14.99	15.75	0.590	0.620
D2	1.65	2.03	0.065	0.080
D3	20.30	20.70	0.799	0.815
E	19.56	20.29	0.770	0.799
E1	16.76	17.53	0.660	0.690
e	15.24 BSC		0.600 BSC	
L	19.81	21.34	0.780	0.840
L1	2.11	2.59	0.083	0.102
Q	5.33	6.20	0.210	0.244
R	2.54	4.57	0.100	0.180
W	-	0.10	-	0.004

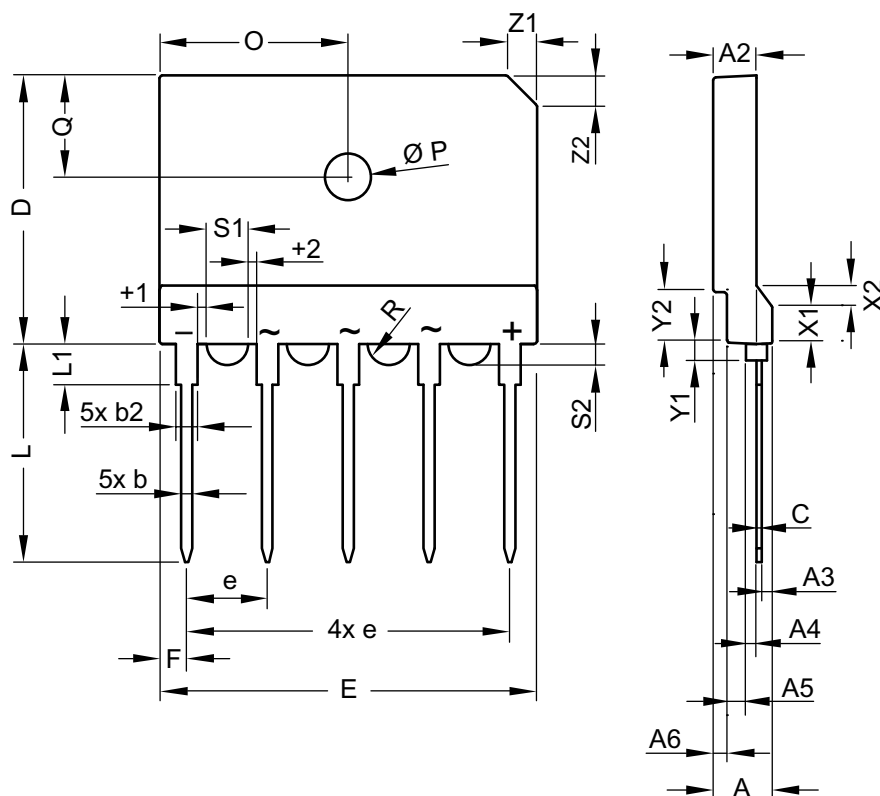
X025a GBFP Weight = 7 g



Dim.	Millimeter		Inches	
	min	max	min	max
A	29.70	30.30	1.170	1.194
B	19.70	20.30	0.776	0.800
C	17.00	18.00	0.670	0.709
D	4.70	4.90	0.185	0.193
E	10.80	11.20	0.426	0.441
F	2.30	2.70	0.091	0.106
G	3.10	3.40	0.122	0.134
H	3.40	3.80	0.134	0.150
I	4.40	4.80	0.173	0.189
J	2.50	2.90	0.099	0.114
K	0.60	0.80	0.024	0.032
L	2.00	2.40	0.079	0.095
M	0.90	1.10	0.035	0.043
N	9.80	10.20	0.386	0.402
O	7.30	7.70	0.288	0.303
P	3.80	4.20	0.150	0.165
Q	(3.0) x 45°		(0.118) x 45°	
Ø R	3.1	3.4	0.122	0.134

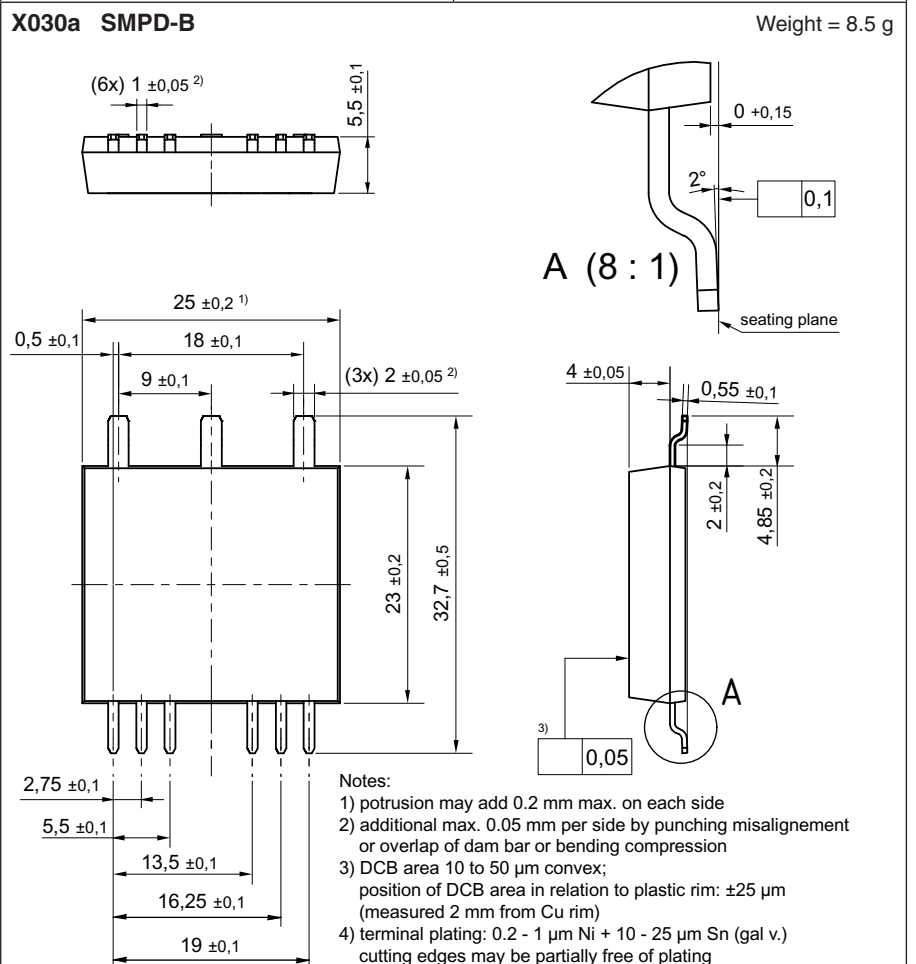
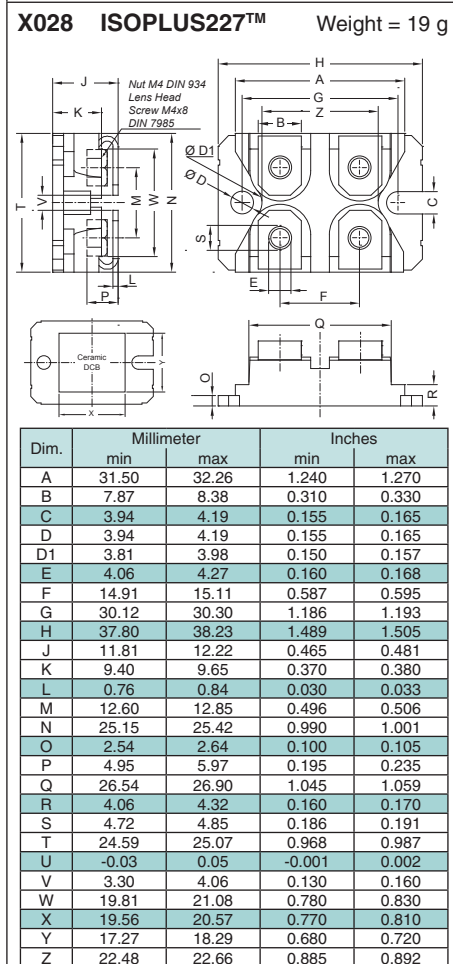
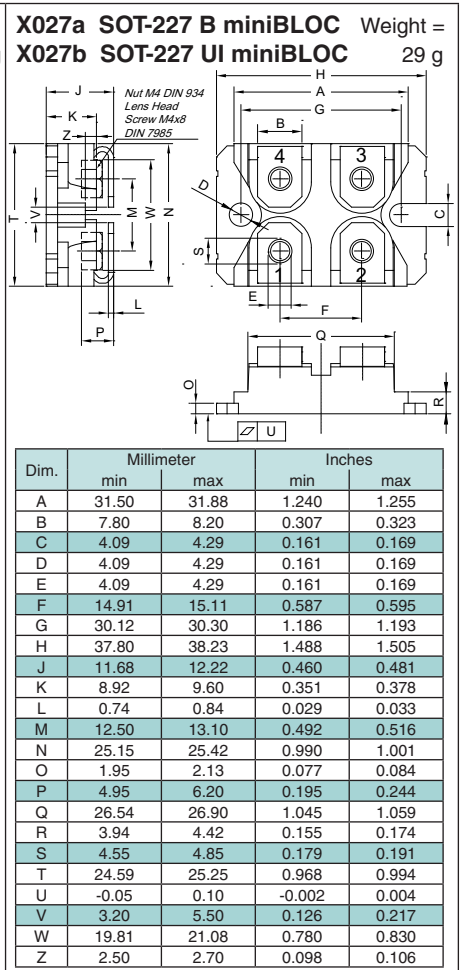
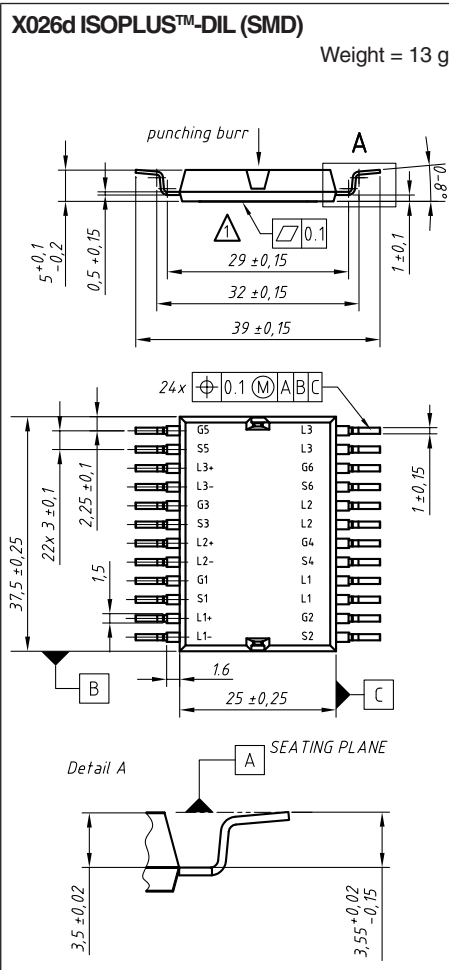
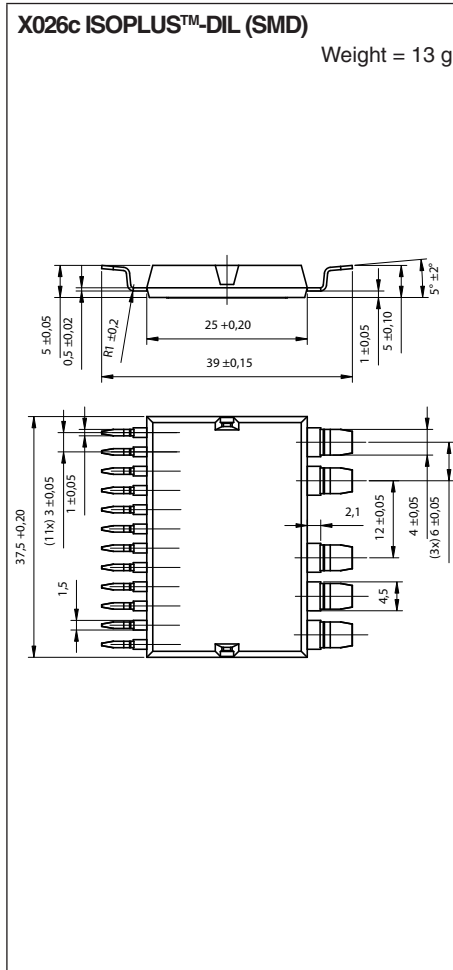
X025b GUPF

Weight = 8.5 g



Dim.	Millimeter			Inches		
	min	typ.	max	min	typ.	max
A	5.40	5.50	5.60	0.213	0.217	0.221
A2	3.90	4.00	4.10	0.154	0.158	0.162
A3	0.95	1.00	1.10	0.037	0.039	0.043
A4	0.95	1.00	1.05	0.037	0.039	0.041
A5	1.60	1.70	1.80	0.063	0.067	0.071
A6	1.25	1.30	1.35	0.049	0.051	0.053
b	0.95	1.00	1.05	0.037	0.039	0.041
b2	1.95	2.00	2.05	0.077	0.079	0.081
C	0.45	0.50	0.55	0.018	0.020	0.022
D	24.80	25.00	25.20	0.977	0.985	0.993
E	34.70	35.00	35.30	1.367	1.379	1.391
e	BSC 7.50		BSC 0.296			
F	2.40	2.50	2.60	0.095	0.099	0.102
L	2.30	20.40	2.50	0.091	0.804	0.099
L1	3.70	3.75	3.80	0.146	0.148	0.150
O	17.40	17.50	17.60	0.686	0.690	0.693
Ø P	4.10	4.20	4.30	0.162	0.165	0.169
Q	9.20	9.30	9.40	0.362	0.366	0.370
½ R	-	1.77	-	-	0.070	-
s1	3.45	3.50	3.55	0.136	0.138	0.140
s2	1.45	1.50	1.55	0.057	0.059	0.061
t1	0.95	1.00	1.05	0.037	0.039	0.041
t2	0.95	1.00	1.05	0.037	0.039	0.041
x1	3.20	3.30	3.40	0.126	0.130	0.134
x2	1.90	2.00	2.10	0.075	0.079	0.083
y1	1.60	1.65	1.70	0.063	0.065	0.067
y2	4.65	4.70	4.75	0.183	0.185	0.187
z1	2.80	2.90	3.00	0.110	0.114	0.118

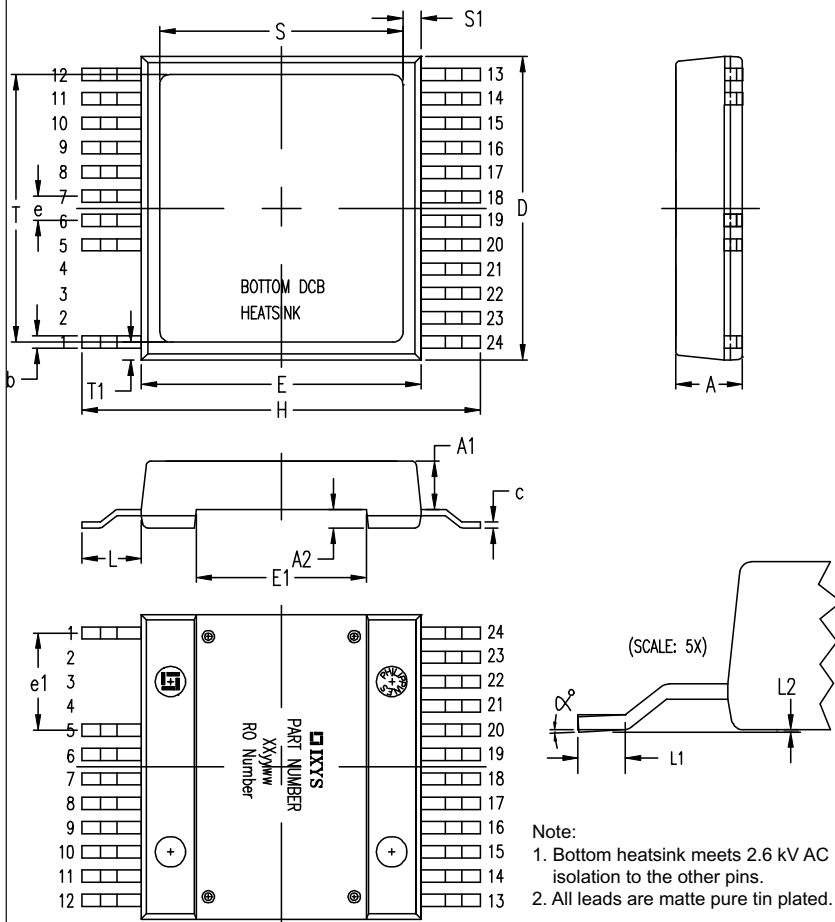
Dimensions in mm and inches (1 mm = 0.0394")



Dimensions in mm and inches (1 mm = 0.0394")

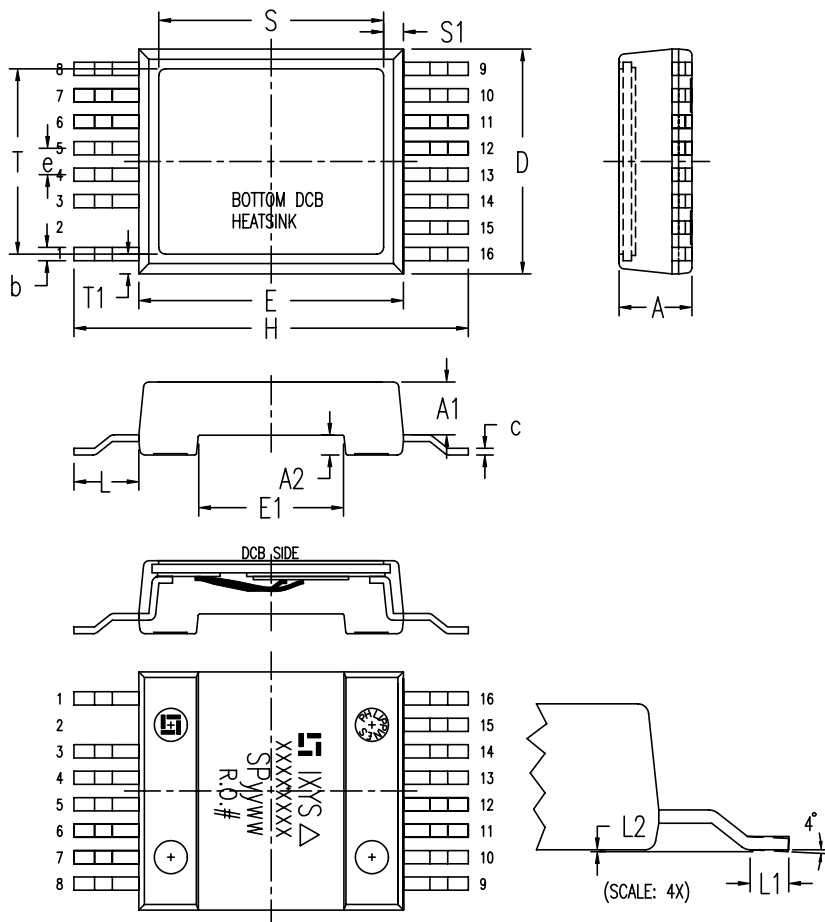
X031...* SMPD-X * See data sheet for pin arrangement

Weight = 8.5 g*



Dim.	Millimeter		Inches	
	min	max	min	max
A	5.30	5.70	0.209	0.224
A1	3.90	4.10	0.154	0.161
A2	1.40	1.60	0.055	0.063
b	0.90	1.15	0.035	0.045
c	0.45	0.65	0.018	0.026
D	24.80	25.25	0.976	0.994
E	22.80	23.25	0.898	0.915
E1	13.80	14.20	0.543	0.559
e	2.00	BSC	0.079	BSC
e1	8.00	BSC	0.315	BSC
H	32.30	33.30	1.272	1.311
L	4.60	5.30	0.181	0.209
L1	1.30	1.70	0.051	0.067
L2	0.00	0.15	0.000	0.006
S	18.85	20.12	0.742	0.792
S1	1.45	2.08	0.057	0.082
T	20.90	22.17	0.823	0.873
T1	1.42	2.03	0.056	0.080
a	4°	-	4°	-

X032... MiniSMPD * See data sheet for pin arrangement



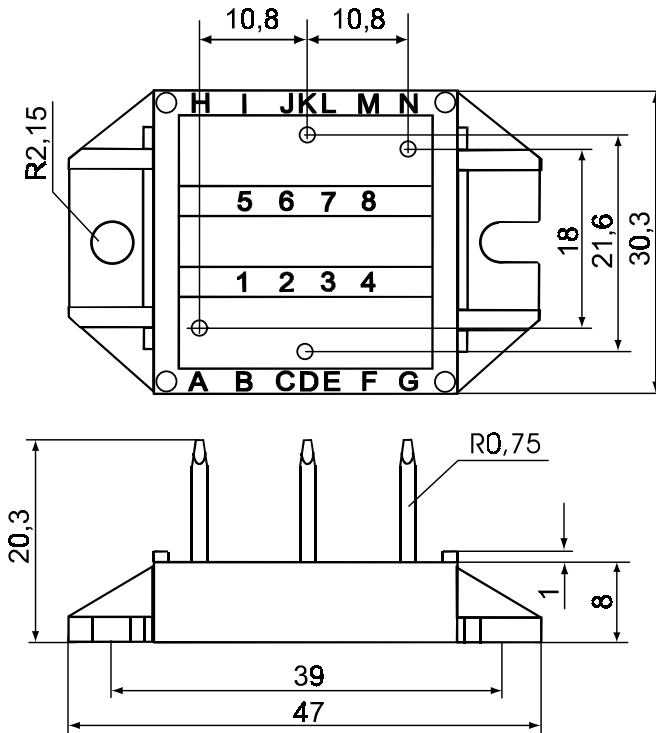
Dim.	Millimeter		Inches	
	min	max	min	max
A	5.30	5.70	0.209	0.224
A1	3.90	4.10	0.154	0.161
A2	1.40	1.60	0.055	0.063
b	0.90	1.15	0.035	0.045
c	0.45	0.65	0.018	0.026
D	16.80	17.20	0.661	0.677
E	19.80	20.20	0.780	0.795
E1	10.80	11.20	0.425	0.441
e	2.00 BSC		0.079 BSC	
H	29.50	30.10	1.161	1.185
L	4.60	5.30	0.181	0.209
L1	1.30	1.70	0.051	0.067
L2	0.00	0.15	0.000	0.006
S	16.80	17.20	0.661	0.677
S1	1.30	1.70	0.051	0.067
T	13.80	14.20	0.543	0.559
T1	1.30	1.70	0.051	0.067

NOTE:

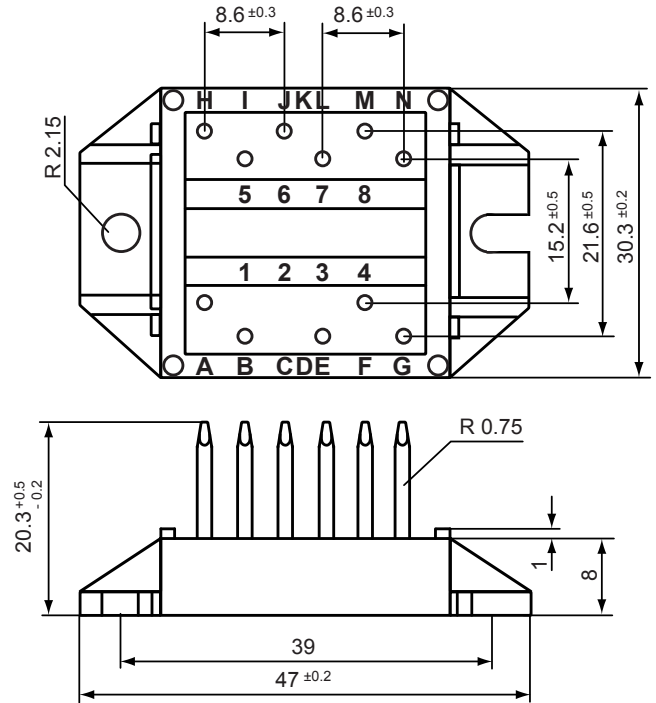
- All leads are matte pure tin plated.
- Cu surface of bottom DCB is pre-Ni plated unless otherwise.
- Cu surface of bottom DCB is electrically isolated 2.500V AC from all other leads.
- Unless other specified, pin out are as follows:
 Pin #1 - Gate
 Pin #3 - Gate return or source
 Pin #4 through #8 - Source (emitter)
 Pin #9 through #16 - Drain (collector)

Dimensions in mm and inches (1 mm = 0.0394")

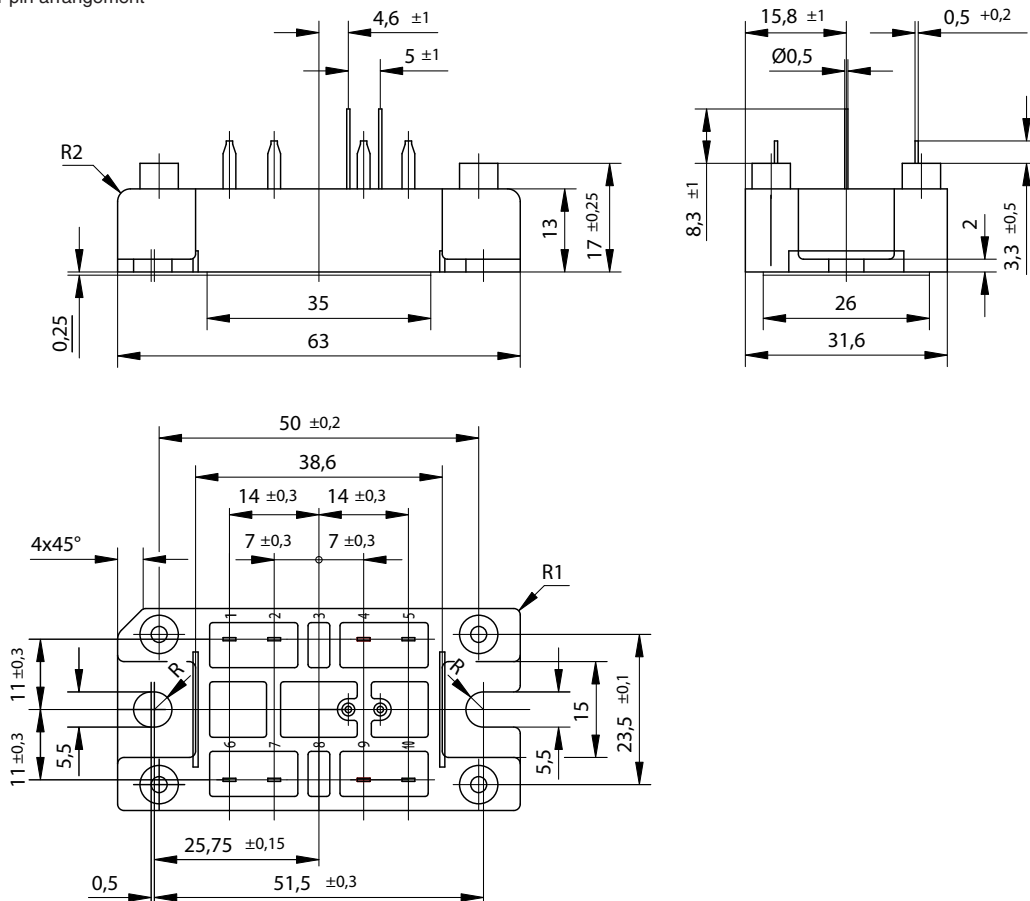
X101 ECO-PAC1 Weight = 19 g
See data sheet for pin arrangement



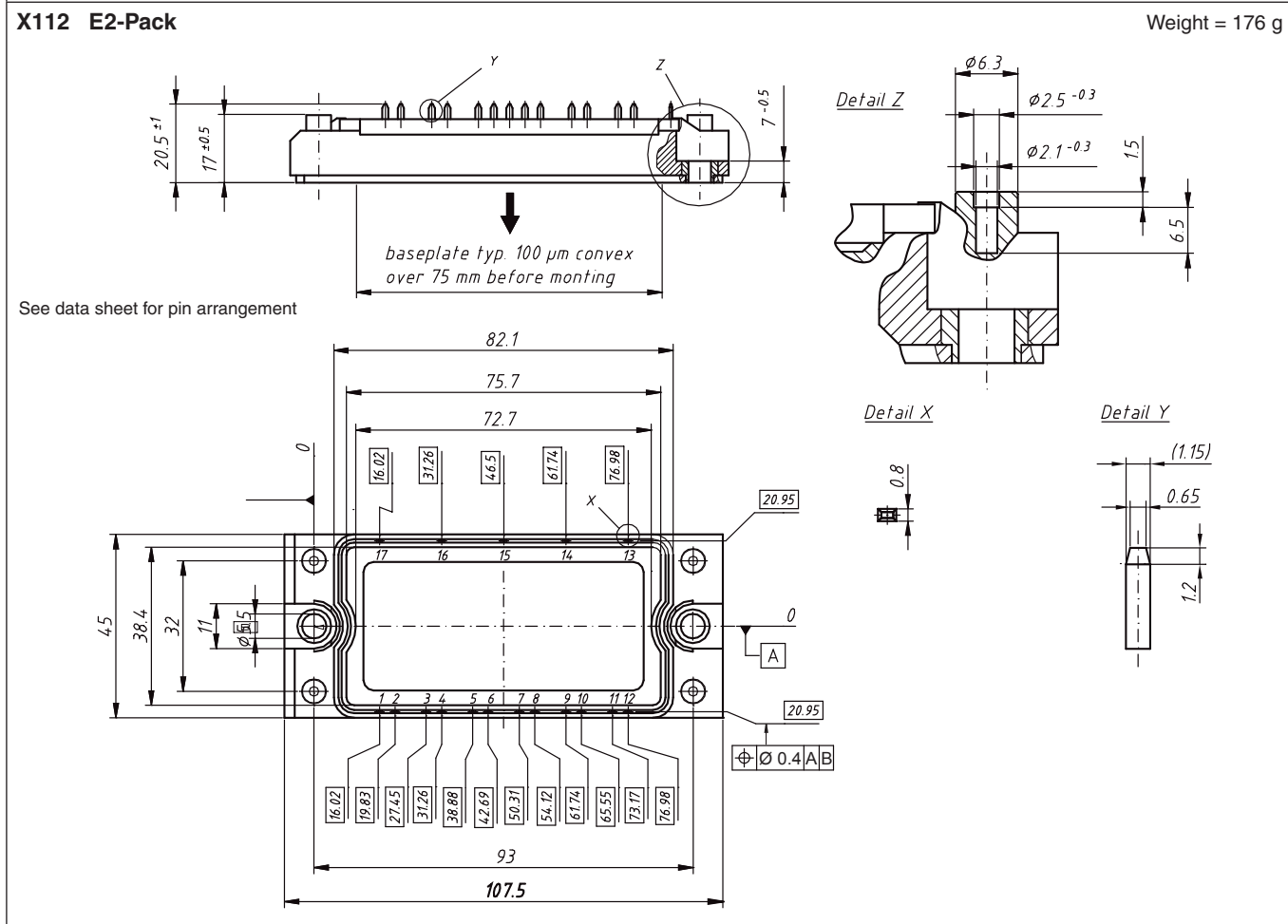
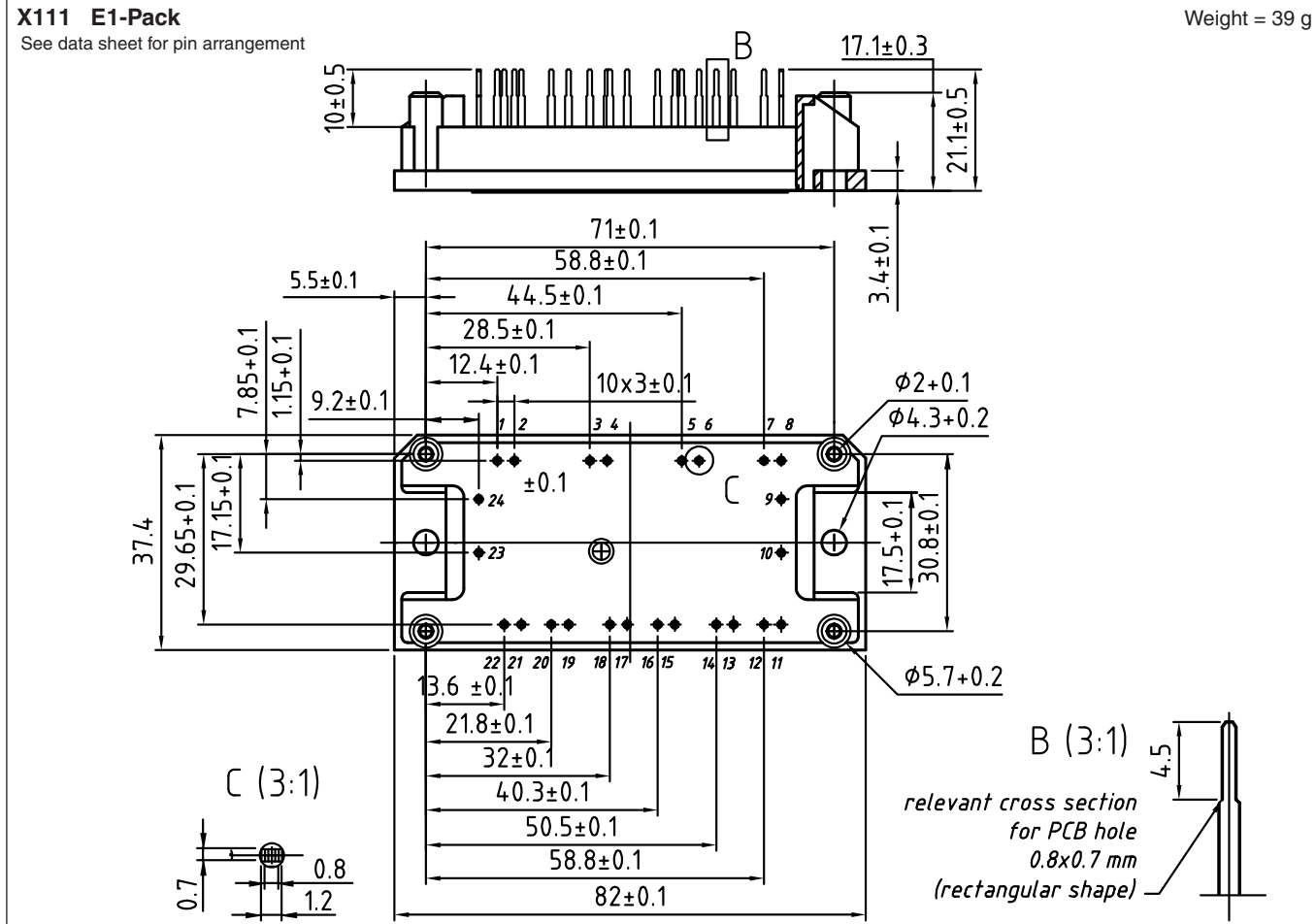
X102 ECO-PAC2 Weight = 23 g
See data sheet for pin arrangement



X103 V1-A-Pack Weight = 37 g
See data sheet for pin arrangement



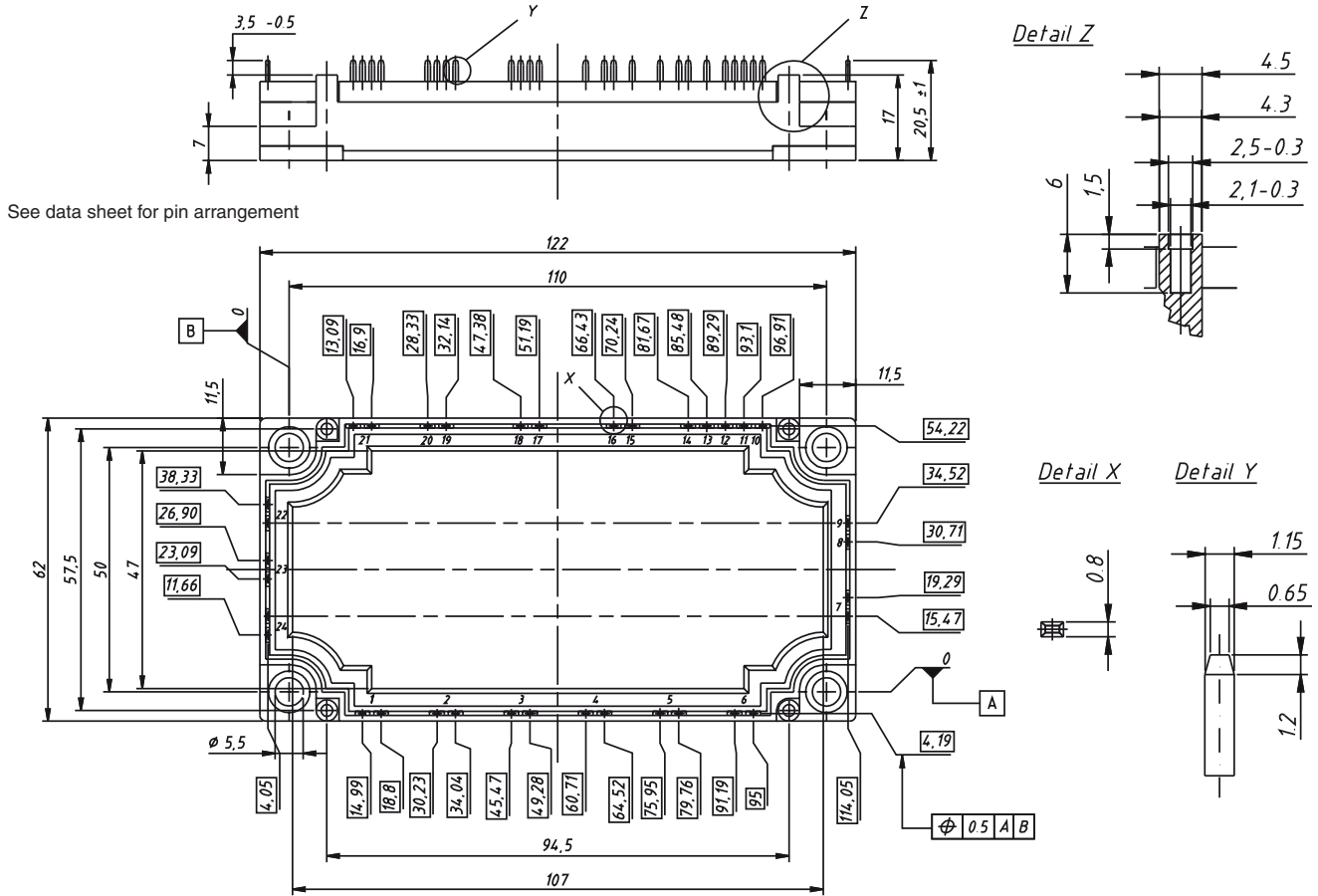
Dimensions in mm and inches (1 mm = 0.0394")



Dimensions in mm and inches (1 mm = 0.0394")

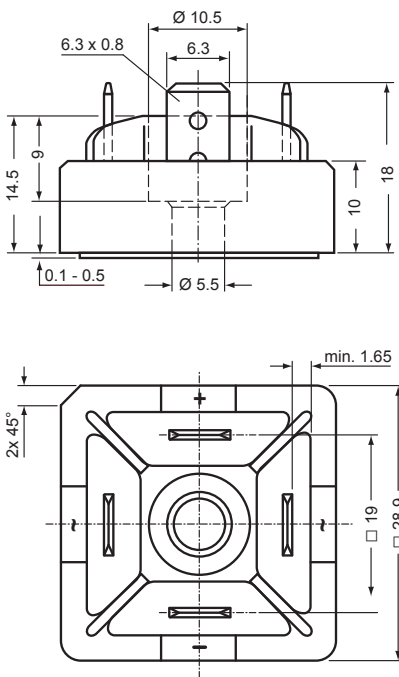
X113 E3-Pack

Weight = 270 g



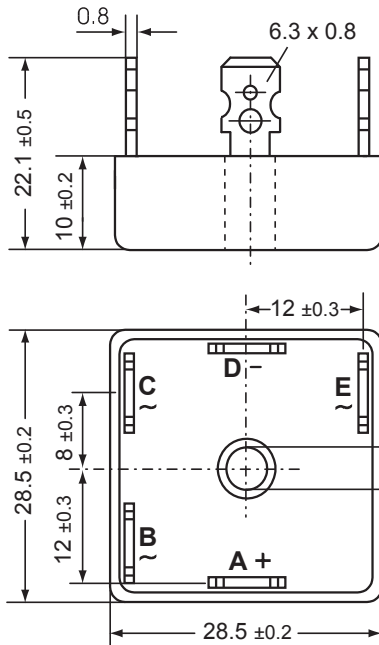
X115 FO-A

Weight = 15 g



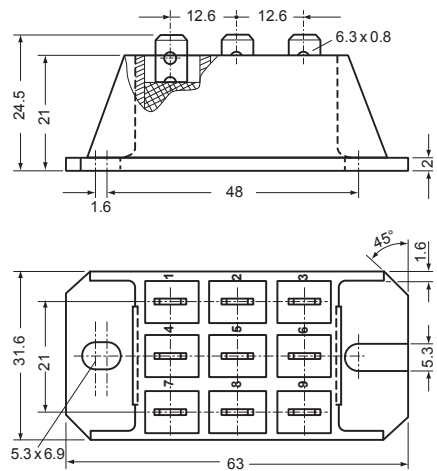
X116 FO-B

Weight = 20 g
 a: VUO
 b: w/o terminal C (VBO)



X117a FO-F-A

Weight = 45 g



Dimensions in mm and inches (1 mm = 0.0394")

<p>X117b FO-F-B Weight = 45 g</p>	<p>X118 FO-T-A Weight = 104 g c: w/o terminal 4, 5, & 6 (VVZ & VVZF) d: w/o terminal 1, 2, 3, 4, 5, & 6 (VUO)</p> <p>See data sheet for pin arrangement</p>	
<p>X119 PWS-A Weight = a: VUO 104 g b: w/o terminal D (VBO) 100 g</p>	<p>X120 PWS-B Weight = a: VUO 203 g b: w/o terminal D (VBO) 193 g</p>	<p>X121 PWS-C Weight = a: VUO 250 g b: w/o terminal D (VBO) 237 g</p>

Dimensions in mm and inches (1 mm = 0.0394")

<p>X122 PWS-D Weight = a: VUO 159 g b: w/o terminal C (VBO) 153 g</p>	<p>X122 PWS-D Flat Weight = c: VUO 118 g</p>	<p>X123 PWS-E Weight = a: VTO 284 g b: w/o terminal 4, 5 & 6 (VVZ) 284 g c: w/o terminal 1, 2, 3, 4, 5 & 6 (VUO) 284 g d: w/o terminal D, 3, 4, 5 & 6 (VHF) 273 g e: w/o terminal D, 1, 2, 3, 4, 5 & 6 (VBO) 273 g</p>
<p>X123 PWS-E Flat Weight = 220 g h: w/o terminal 1, 2, 3, 4, 5 & 6 (VUO)</p>	<p>X125 TO-240 AA Weight = a: + Kelvin contact (MCC) 81 g b: + Kelvin contact, w/o pin 6 & 7 (MCD) 81 g c: w/o Kelvin contact 4 & 7 (MCC) 81 g d: w/o Kelvin contact 4, 7 & pin 6 (MCD) 81 g e: w/o pin 4, 5, 6 & 7 (MDD) 81 g f: w/o terminal 2 and pin 4 & 7 (VMO) 74 g g: + Kelvin contact, w/o pin 7 (VMM) 81 g</p> <p>General tolerance: DIN ISO 2768 class „c“</p> <p>Optional accessories: Keyed gate/cathode twin plugs Wire length: 350 mm, gate = white, cathode = red UL 758, style 3751 Type ZY 200L (L = Left for pin pair 4/5) Type ZY 200R (R = Right for pin pair 6/7)</p>	

Dimensions in mm and inches (1 mm = 0.0394")

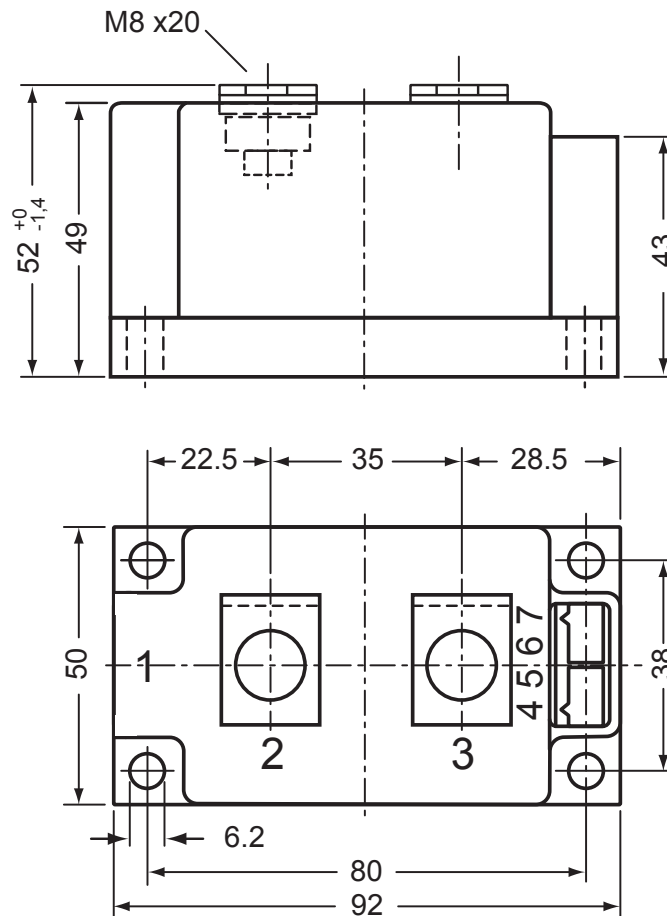
<p>X126 Y4-M6 Weight =</p> <p>a: + Kelvin cont., w/o pin 8 up to 11 (MCC) 131 g b: + Kelvin cont., w/o pin 6 up to 11 (MCD) 131 g c: w/o pin 4 up to 11 (MDD) 126 g d: w/o terminal 2 & pin 4 up to 11 (MEO) 108 g</p> <p>Optional accessories for modules Keyed gate/cathode twin plugs with wire length = 350 mm, gate = white, cathode = red Type ZY 180L (L = Left for pin pair 4/5) } UL 758, style 3751 Type ZY 180R (R = Right for pin pair 6/7)</p>	<p>X127 Y4-M5 Weight =</p> <p>a: w/o pin 8 up to 11 (MII) 110 g b: w/o pin 6 up to 11 (MID) 108 g c: w/o pin 4, 5 & 8 up to 11 (MDI) 108 g</p> <p>General tolerances: DIN ISO 2768-T1-m</p>	<p>X128 Y3-DCB Weight =</p> <p>a: w/o pin 4 up to 7 (VMM, MII) 222 g b: w/o pin 4 up to 9 (MID) 220 g c: w/o pin 4 up to 7, 10 & 11 (MDI) 220 g d: w/o terminal 3 & pin 6 up to 11 (VMO) 200 g</p>
<p>X129 Y2-DCB Weight =</p> <p>a: + Kelvin contact (MCC) 245 g b: + Kelvin contact, w/o pin 6 & 7 (MCD) 245 g c: w/o pin 4, 5, 6 & 7 (MDD) 244 g</p>	<p>X130 Y3-Li Weight =</p> <p>a: w/o pin 4-7, low inductance (VMM, MII) 226 g b: w/o pin 4-9, low inductance (MID) 226 g c: w/o pin 4-7, 10&11, low inductance (MDI) 226 g d: w/o terminal 1&pin 6-11, low ind. (VMO) 206 g e: w/o pin 4&5, low ind. (VMM, MII+NTC) 226 g f: w/o pin 4, 5, 8 & 9, low ind. (MID+NTC) 226 g</p>	<p>X131 Y1-CU Weight =</p> <p>a: + Kelvin contact (MCC) 680 g b: + Kelvin contact, w/o pin 6&7 (MCD) 680 g c: w/o pin 4, 5, 6 & 7 (MDD) 680 g</p> <p>Optional accessories for modules Keyed gate/cathode twin plugs with wire length = 350 mm, gate = white, cathode = red Type ZY 180L (L = Left for pin pair 4/5) } UL 758, style 3751 Type ZY 180R (R = Right for pin pair 6/7)</p>

Dimensions in mm and inches (1 mm = 0.0394")

X132 Y1-2-CU

a: + Kelvin contact w/o pin 6&7 (MCO)
b: w/o pin 4, 5, 6 & 7 (MDO)

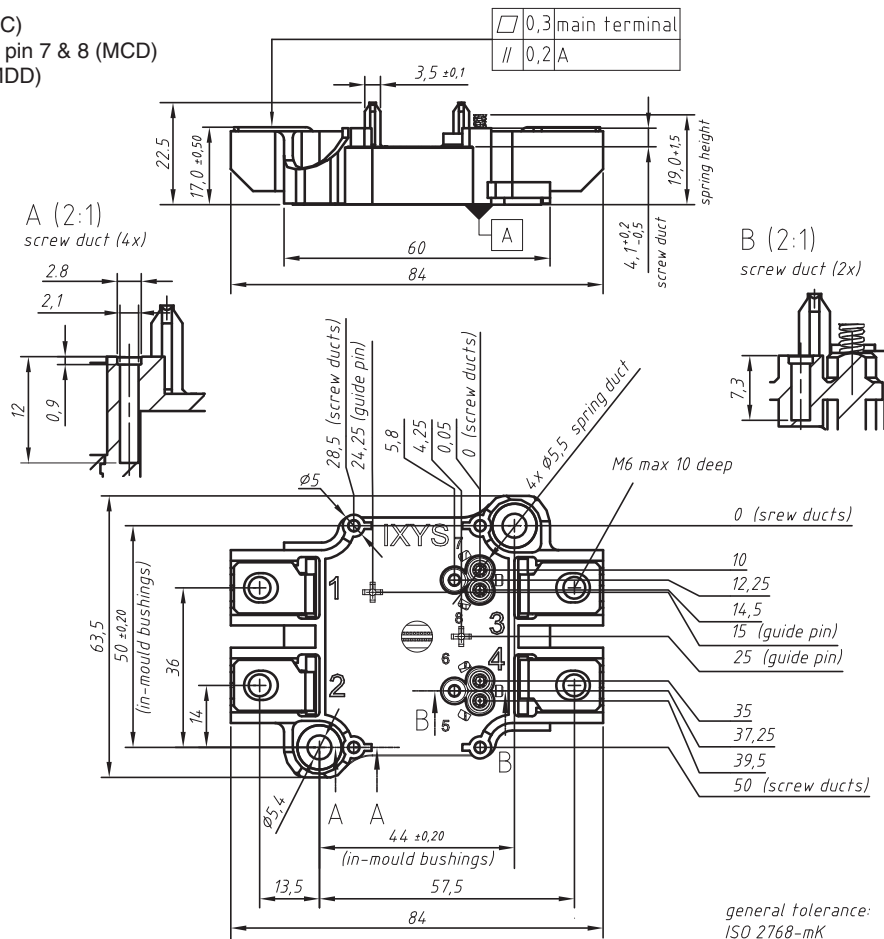
Weight = 650 g



X141 SimBus A

a: + Kelvin contact (MCC)
b: + Kelvin contact, w/o pin 7 & 8 (MCD)
c: w/o pin 5, 6, 7 & 8 (MDD)

Weight = 152 g

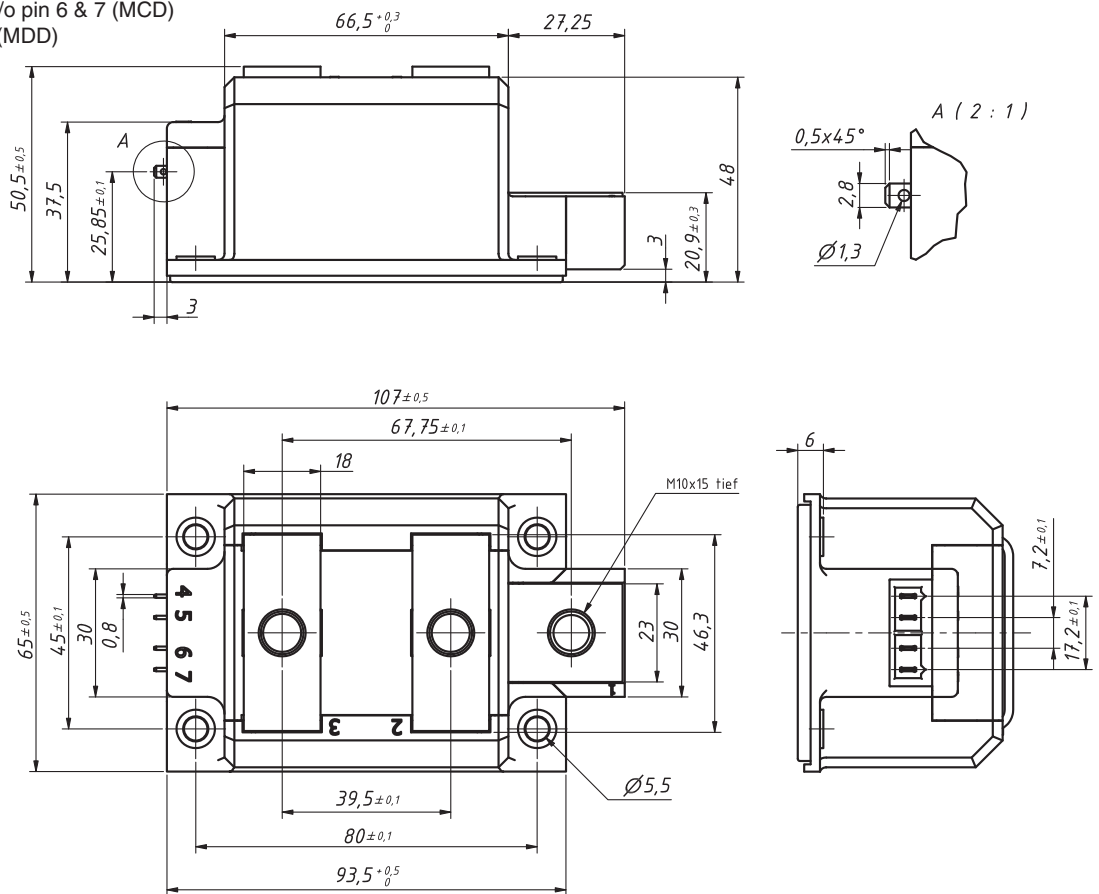


Dimensions in mm and inches (1 mm = 0.0394")

X142 ComPack

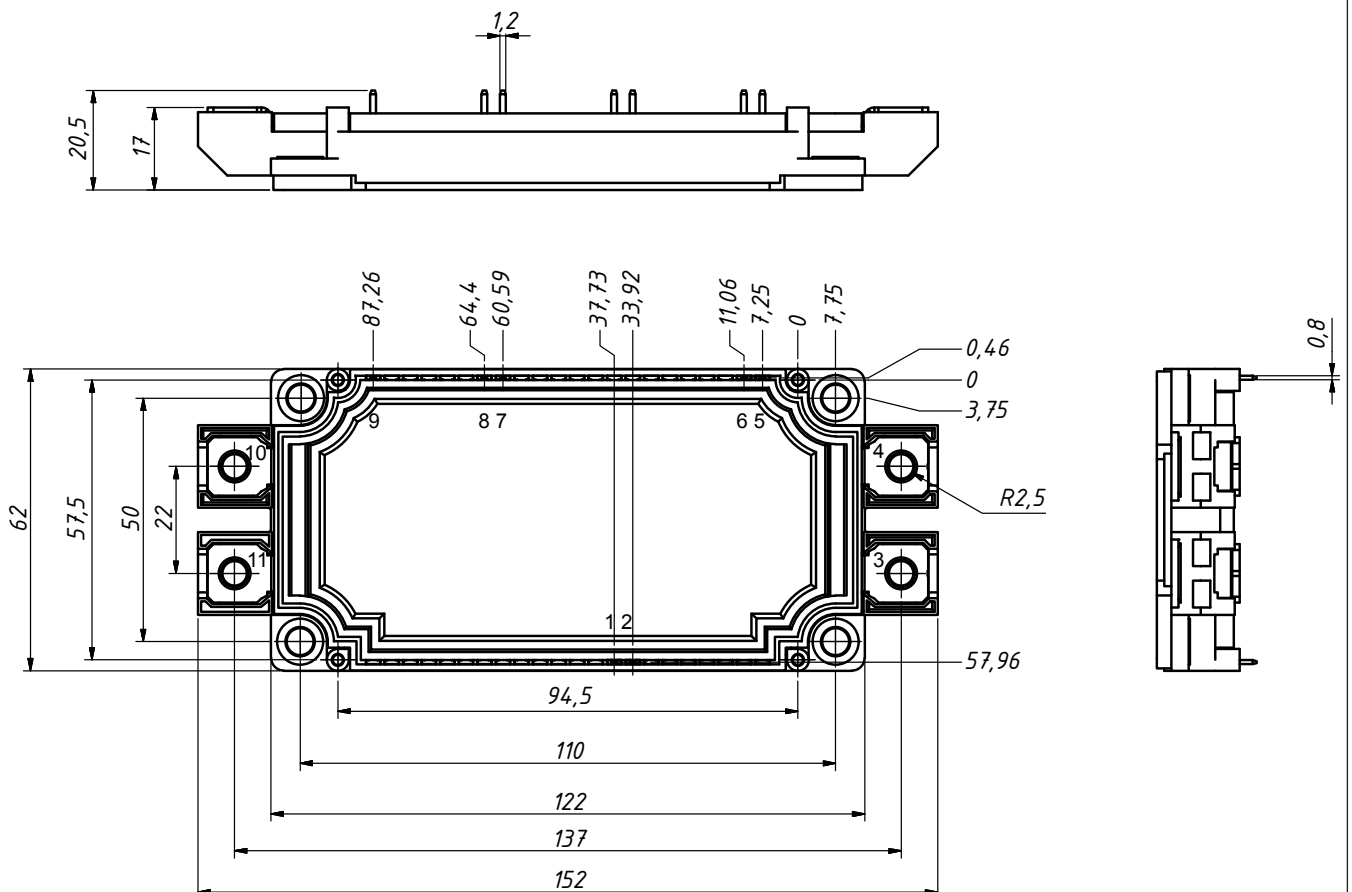
- a: + Kelvin contact (MCC)
- b: + Kelvin contact, w/o pin 6 & 7 (MCD)
- c: w/o pin 4, 5, 6 & 7 (MDD)

Weight = 500 g



X143a SimBus F

Weight = 150 g



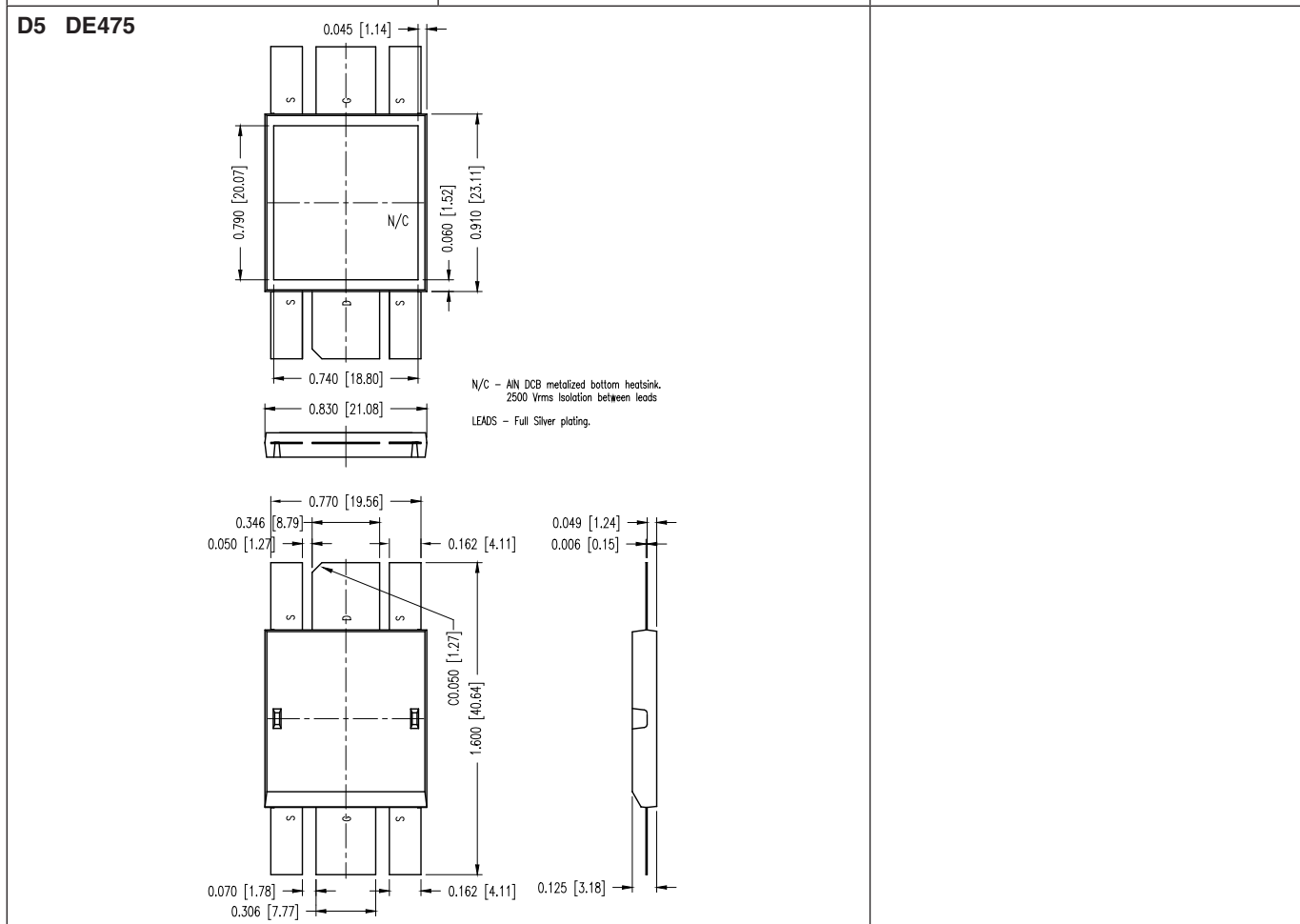
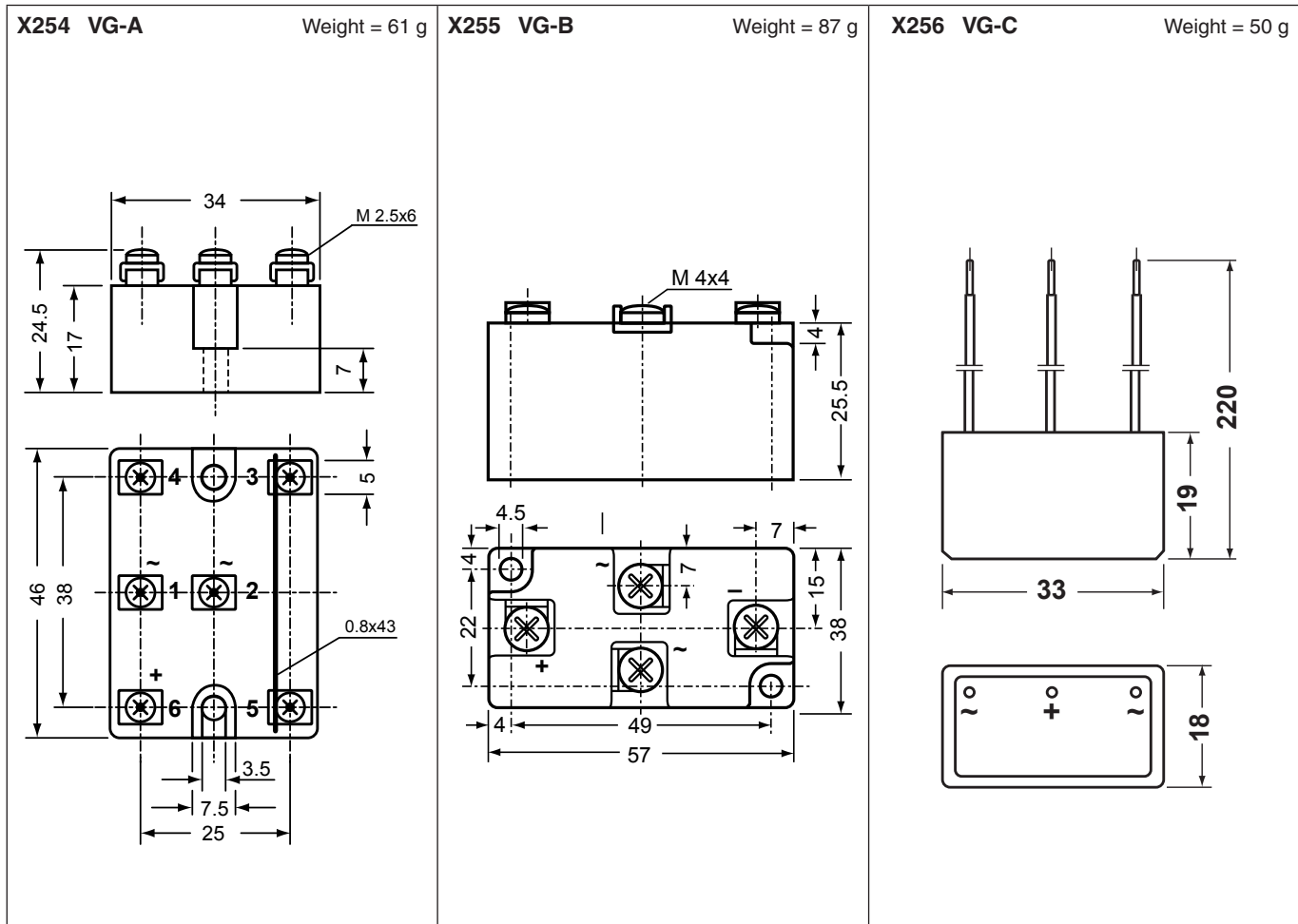
Dimensions in mm and inches (1 mm = 0.0394")

<p>X200 Metal-can Weight = 2.5 g</p>	<p>X201 FP-Case (oilproof) Weight = 0.9 g</p>	<p>X202 BOD-Package Weight = 9.5 g</p>
<p>X204 DO-203 AA [M] (DO-4) Weight = 6 g</p>	<p>X205 DO-203 AA [UNF] (DO-4) Weight = 5.5 g</p>	<p>X206a DO-203 AB [UNF] (DO-5) X206b DO-203 AB [M] (DO-5) Weight = 14 g</p>

Dimensions in mm and inches (1 mm = 0.0394")

<p>X207 DO-203 AB (DO-5) Weight = 20 g</p>	<p>X209 TO-208 AA (TO-48) Weight = 11.6 g</p>	<p>X210 TO-208 AC (TO-65) Weight = 21.7 g</p>																																																								
<p>X251 UGE-single Weight = 125 g</p>	<p>X252 UG Weight = 155 g</p>	<p>X253a UG Weight = 310 g b: w/o middle terminal</p>																																																								
			<table border="1"> <thead> <tr> <th>Type</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> <th>f</th> <th>g</th> <th>h</th> <th>i</th> <th>k</th> </tr> </thead> <tbody> <tr> <td>UGB 3132 AD</td> <td>80</td> <td>70</td> <td>57</td> <td>58.5</td> <td>260</td> <td>6</td> <td>15</td> <td>15</td> <td>15</td> <td></td> </tr> <tr> <td>UGB 6124 AG</td> <td>135</td> <td>125</td> <td>112</td> <td>58.5</td> <td>260</td> <td>11</td> <td>32.5</td> <td>25</td> <td>32.5</td> <td></td> </tr> <tr> <td>UGD 6123 AG</td> <td>135</td> <td>125</td> <td>112</td> <td>58.5</td> <td>260</td> <td>8</td> <td>30</td> <td>18</td> <td>18</td> <td>30</td> </tr> <tr> <td>UGD 8124 AG</td> <td>135</td> <td>125</td> <td>112</td> <td>58.5</td> <td>260</td> <td>8</td> <td>30</td> <td>18</td> <td>18</td> <td>30</td> </tr> </tbody> </table> <p style="text-align: right;">Dimensions in mm</p>	Type	a	b	c	d	e	f	g	h	i	k	UGB 3132 AD	80	70	57	58.5	260	6	15	15	15		UGB 6124 AG	135	125	112	58.5	260	11	32.5	25	32.5		UGD 6123 AG	135	125	112	58.5	260	8	30	18	18	30	UGD 8124 AG	135	125	112	58.5	260	8	30	18	18	30
Type	a	b	c	d	e	f	g	h	i	k																																																
UGB 3132 AD	80	70	57	58.5	260	6	15	15	15																																																	
UGB 6124 AG	135	125	112	58.5	260	11	32.5	25	32.5																																																	
UGD 6123 AG	135	125	112	58.5	260	8	30	18	18	30																																																
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Dimensions in mm and inches (1 mm = 0.0394")



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