Interface Materials

Insulators

Aluminum Oxide Ceramic

Insulating Covers

Bushings

Mica

Thermalsil

Beryllium Oxide Ceramic

Hard Anodized Aluminum

Mica insulators

Mica insulators provide high maximum operating temperatures (550°C) and excellent electrical properties.

FIGURE 1

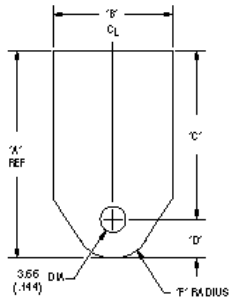


FIGURE 2

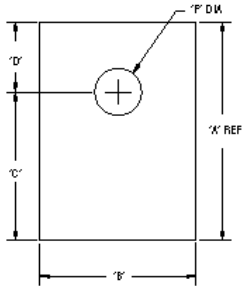


FIGURE 3

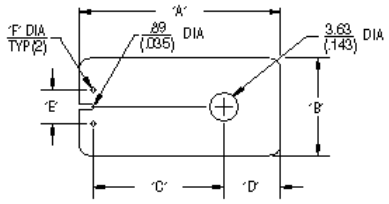
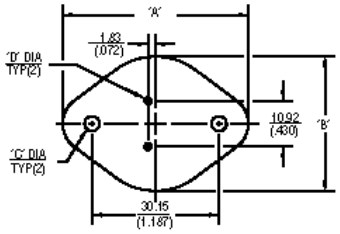


FIGURE 4



Note: Tolerances are ±.38mm (.015") unless otherwise specified.

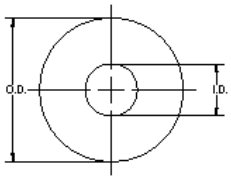
Part No.	RoHS	PCN	Figure	Case Style	A	B	C	D	E	F	Thickness
56-02-95	RoHS ✓ Compliant	N/A	1	TO-218	23.24 (0.915)	18.80 (0.740)	16.26 (0.640)	6.98 (0.275)	N/A	5.59 (.220)	0.05/0.10 (0.002/0.004)

56-02-101G*	RoHS Compliant	N/A	2	TO-218	26.16 (1.000)	22.61 (0.890)	17.91 (0.705)	8.26 (0.325)	N/A	11.30 (.144)	0.05/0.10 (0.002/0.004)
56-77-10	RoHS Compliant	N/A	3	TO-220	21.89 (0.862)	13.21 (0.520)	14.73 (0.580)	5.26 (0.270)	5.08 (0.200)	1.75 (0.070)	0.05/0.10 (0.002/0.004)
56-77-8G	RoHS Compliant	Product Change Notice	2	TO-220	18.93 (0.745)	13.84 (0.545)	13.54 (0.533)	5.38 (0.212)	N/A	3.81 (0.150)	0.05/0.10 (0.002/.004)
56-77-11G	RoHS Compliant	Product Change Notice	2	TO-220	18.93 (0.745)	13.84 (0.545)	13.54 (0.533)	5.38 (0.212)	N/A	3.05 (0.120)	0.05/0.10 (0.002/0.004)
56-03-2G	RoHS Compliant	Product Change Notice	4	TO-3	42.04 (1.655)	27.00 (1.063)	3.96 (0.156)	1.57 (0.062)	N/A	N/A	0.05/0.10 (0.002/0.004)
56-03-8G	RoHS Compliant	Product Change Notice	4	TO-3	42.85 (1.687)	30.15 (1.187)	3.96 (0.156)	1.57 (0.062)	N/A	N/A	0.05/0.10 (0.002/0.004)

* This insulator is also for TO-18, TO-247, and TO3P.

Note: Tolerances are ±.38mm (.015") unless otherwise specified.

Property	Typical Value 25℃
Electrical	
Dielectric Strength 0.025mm to 0.076mm thick in air (1 to 3 mils thick in air)	172 x 10^3 volts/mm (4500 volts/mil)
Dielectric Constant	6.5 to 8.7
Dissipation Factor 10^6 Cycles	.0001 -.004
Volume Resistivity	10^{15} ohm-cm
Physical	
Modulus of Elasticity in Tension	172 x 10^3 (25 x 10^6 psi)
Tensile Strength	310 MPa (45,000 psi)
Hardness Mohs Shore	3.0 115
Comprehensive Strength	2.21 x 10^8 Pa (32,000 psi)
Specific Gravity	2.9
Thermal	
Thermal Conductivity:	0.528 $Wm^{-1}℃^{-1}$ (0.30 Btu/hr.ft ℉)
Coefficient of Thermal Expansion	3.24 x 10^{-5}/℃ (1.8x 10^{-5}/℉)
Specific Heat	.084 KJ/Kg℃ (.02 Btu/Lb ℉]
Melting Point	1275℃
Maximum Operating Temperature (1022℃)	550℃
Chemical Composition	
Silica	45.4%
Alumina	37.5%
Potash	12.0%
Water	5.0%



Part Number	ID	OD	Diameter Tolerances	Thickness
56-02-10G	5.16 (0.203)	14.30 (0.563)	±13 (0.005)	0.05/0.10 (0.002/0.004)
56-02-72G	6.55 (0.258)	25.40 (1.00)	±38 (0.015)	0.10/0.15 (0.004/0.006)