

Section C CONDUCTIVE SILICONE COMPOUND

Codes - 823-825

DESCRIPTION

SURSHIELD shielding volume conductive solid silicone compounds are supplied in six different standard conductive materials in sheets 0.8 mm, 1.6 mm, 2.0 mm, and other thicknesses.

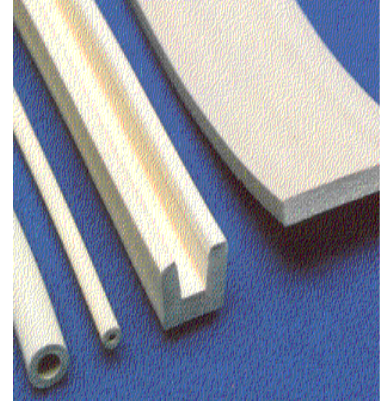
Sheet sizes are 250 mm x 250 mm, 300 mm x 300 mm and 450 mm x 520mm in some cases. Other thicknesses, sheet sizes and profile extrusions (see following pages) can be manufactured in a hardness range of 70-80 IRHD. For low cost with commercial performance, we offer a nickel plated graphite loaded polymer 52-CSS-116 or 52-CSS-114 which is carbon loaded. (see table below)

APPLICATION

These conductive sheets can be readily cut or stamped: gasket fabrication is by use of silicone conductive adhesive 53-CCC-240, which is silver aluminium loaded or using a conductive pressure sensitive (CPSA) adhesive.

CUSTOMISED PRODUCTS

Custom-moulded RFI/EMI seals and die-cut gaskets can be provided, together with extruded profiles of complex section, using one of the six standard silicone compounds (see table below) or using special formulations based on fluorosilicones developed for use with hydraulic fluids, petroleum or kerosene formulation.



TYPICAL PROPERTIES

Property	52-CSS-114	52-CSS-116	52-CSS-117	52-CSS-118	52-CSS-119	52-CSS-120
Elastomer	Silicone Solid	Silicone Solid	Silicone Solid	Silicone Solid	Silicone Solid	Silicone Solid
Filler	Carbon	Nickel plated graphite	Silver coated glass Ballotini	Silver plated Nickel	Silver plated Copper	Silver plated Aluminium
Colour	Grey/Black	Grey	Cream	Cream	Cream	Blue
Hardness Shore A	70	30 - 80	65	75	85	65
Specific Gravity	1.2	1.95	1.90	4	4.8	2.0
Tensile strength Mpa	3.2	1	1.2	1.2	2.0	1.2
Elongation at Break % (min)	100	100	100	100	20	30
Temp. Range °C	-55 to +200	-55 to +150	-55 to +160	-55 to +125	-55 to + 125	-55 to +160
Shielding Effectiveness dB(min) 20MHz-10GHz E field	50	100	90	110	120	115
Vol. Resistivity Ohm Cm.	7	0.1	0.006	0.005	0.005	0.008

Pressure conductive silicone foams are available in sheet and gasket forms using a nickel plated graphite filler (52-CSS-116F).

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