Techsil Conductive Elastomer LTE-45

LTE-45 is a Shore A 85 durometer hardness silicone elastomer filled with silver plated copper particles as the conductive and shielding media. This material has excellent shielding properties and conductivity, and is a high strength, high hardness product suitable for waveguide, choke, cover and flanges with grooves for EMI and pressure sealing. LTE-45 has excellent sealing properties at temperature extremes, is ozone resistant and has a long shelf life if stored in the absence of moisture, light and sulfur. LTE-45 is the military gasket material of choice due to its high resistance to EMP induced current. LTE-45 has been qualified to MIL-DTL-83528 Type K, the government specification for conductive elastomer gasket material. This material can be supplied as molded parts, extruded shapes, die cut parts, or as standard sheet stock. Please contact one of the professionals at Leader Tech for additional information regarding your specific application.

Elastomer:	Silicone
Filler Material:	Silver Plated Copper
Color:	Tan (Custom colors available upon request)

Electrical Properties

			Test Method
Volume Resistivity (ohm-cm) (as received)	Max.	.005	MIL-DTL-83528 (Para. 4.5.10)
Shielding Effectiveness (db)	Actual		MIL-DTL-83528 (Para. 4.5.12) MIL-STD-285
20 MHz		119	
100 MHz		125	
600 MHz		123	
2 GHz		143	
10 GHz		126	

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.010	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	Max.	.010	MIL-DTL- (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.010	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.005	
After Exposure to EMP (ohm-cm) (0.9 KAmp/inch of Perimeter)	Max.	.010	MIL-DTL-83528E (Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		3.5	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		85	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	400	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	100	ASTM D412 (MIL Para. 4.5.6)
	Max.	300	
Tear Strength (PPI)	Min.	40	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	35	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (^{0}C)	Max.	+125	MIL-DTL-83528 (Table 1-Type K)
Lower Operating Temp (^{0}C)	Min.	-45	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.	2.5	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion		N/S	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable

LEADER TECH a HEICO company
Global EMI Shielding Technology Center
12420 Race Track Rd., Tampa, Florida 33626
866.TECH.EMI (866.832.4364) t 813.855.6921 f 813.855.3291

A passion in all we do
www.LeaderTechInc.com
ISO 9001: 2008 CERTIFIED
RoHS COMPLIANT