

Techsil Conductive Elastomer LTE-75

LTE-75 is a Shore A 45 durometer hardness silicone elastomer filled with silver particles as the conductive and shielding media. This material has good shielding properties and conductivity and meets the requirements of MIL-DTL-83528 type J. This material also requires a lower compressive force in order to reach the desired state of compression. LTE-75 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-75 exhibits good performance in non-corrosive environments. This material can be supplied as molded parts, die cut parts, extruded profiles, or as standard sheet stock. Please contact Leader Tech for additional information regarding your specific application.

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

Electrical Properties

Test Method

Property	Max.	Value	Test Method
Volume Resistivity (ohm-cm) (as received)	Max.	.010	MIL-DTL-83528 (Para. 4.5.10)
Shielding Effectiveness (db)	Actual		MIL-DTL-83528 (Para. 4.5.12) MIL-STD-285
20 MHz		113	
100 MHz		116	
600 MHz		126	
2 GHz		143	
10 GHz		126	

Electrical Stability

Property	Max.	Value	Test Method
After Heat Aging (ohm-cm)	Max.	.015	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	Max.	.020	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.015	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.010	
After Exposure to EMP (ohm-cm) (0.9 KAmper/Inch of Perimeter)	Max.	.015	MIL-DTL-83528 (Para. 4.5.16)

Physical Properties

Property	Min.	Max.	Value	Test Method
Specific Gravity (+/-0.25)			1.7	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)			45	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.		150	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.		50	ASTM D412 (MIL Para. 4.5.6)
	Max.		250	
Tear Strength (PPI)	Min.		20	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.		35	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.		+160	MIL-DTL-83528 (Table 1-Type J)
Lower Operating Temp. (°C)	Min.		-55	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.		8.0	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion			NS	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable