

Techsil Conductive Elastomer LTE-40

LTE-40 is a Shore A 70 durometer hardness fluorosilicone elastomer filled with silver plated aluminum particles as the conductive and shielding media. This material has good shielding properties and conductivity and meets the requirements of MIL-DTL-83528 type D material. This material 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-40 provides good corrosion resistance with aluminum and other substrates. It is recommended for applications where there are dissimilar mating surfaces, the presence of salt fog or in uncontrolled environments. This material can be supplied as molded parts, extruded shapes, die cut parts, or as standard sheet stock. Please contact Leader Tech for additional information regarding your specific application.

Elastomer:	Fluorosilicone
Filler Material:	Silver Plated Aluminum
Color:	Tan (Custom colors available upon request)

Electrical Properties

Test Method

Property	Max.	Value	Test Method
Volume Resistivity (ohm-cm) (as supplied)	Max.	.012	MIL-DTL-83528 (Para. 4.5.10)
Shielding Effectiveness (db)	Actual		MIL-DTL-83528 (Para. 4.5.12) MIL-STD-285
20 MHz		118	
100 MHz		126	
600 MHz		124	
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.	.015	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.015	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.012	
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)			2.0	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)			70	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.		180	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.		60	ASTM D412 (MIL Para. 4.5.6)
	Max.		260	
Tear Strength (PPI)	Min.		35	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.		30	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.		+160	MIL-DTL-83528 (Table 1-Type D)
Lower Operating Temp. (°C)	Min.		-55	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.		3.5	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion			SUR	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable