

Techsil Conductive Elastomer LTE-25

LTE-25 is a Shore A 80 durometer hardness silicone elastomer filled with pure silver particles as the conductive and shielding media. This material has excellent shielding properties and conductivity and meets the requirements of MIL-DTL-83528 type H. 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. This material has excellent resistance to Electromagnetic pulse (EMP), and higher physical properties. 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:	Silicone
Filler Material:	Pure Silver
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		118	
100 MHz		126	
600 MHz		127	
2 GHz		143	
10 GHz		125	

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.008	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	Max.	.006	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.006	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.005	
After Exposure to EMP (ohm-cm) (0.9 KAmper/inch of Perimeter)	Max.	.008	MIL-DTL-83528 (Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		4.0	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		80	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	400	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	90	ASTM D412 (MIL Para. 4.5.6)
	Max.	290	
Tear Strength (PPI)	Min.	60	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	60	ASTM D396 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+160	MIL-DTL-83528 (Table 1-Type H)
Lower Operating Temp. (°C)	Min.	-55	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.	2.5	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion		NS	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable