

Techsil Conductive Elastomer LTE-20

LTE-20 is a Shore A 65 durometer hardness silicone elastomer filled with silver plated aluminum particles as the conductive and shielding media. This material has excellent shielding properties and conductivity and meets the re-quirements of MIL-DTL-83528 type B. 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-20 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:	Silicone
Filler Material:	Silver Plated Aluminum
Color:	Tan (Custom colors available upon request)

Electrical Properties

			Test Method
Volume Resistivity (ohm-cm) (as received)	Max.	.008	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		126	
600 MHz		125	
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.	.015	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.012	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.008	
After Exposure to EMP (ohm-cm) (0.9 KAmper/inch of Perimeter)	Max.	.010	MIL-DTL-83528 (Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		2.0	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		65	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	200	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	100	ASTM D412 (MIL Para. 4.5.6)
	Max.	300	
Tear Strength (PPI)	Min.	30	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	32	ASTM D396 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+160	MIL-DTL-83528 (Table 1-Type B)
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		NS	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable