

## Techsil Conductive Elastomer LTE-55

**LTE-55** is a Shore A 65 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 E. LTE-55 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-55 exhibits excellent performance in non-corrosive environments and has higher physical strength. 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.	.002	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		114	
2 GHz		148	
10 GHz		126	

### Electrical Stability

Property	Max.	Value	Test Method
After Heat Aging (ohm-cm)	Max.	.010	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	Max.	.010	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.010	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.002	
After Exposure to EMP (ohm-cm) (0.9 KAmper/Inch of Perimeter)	Max.	.010	MIL-DTL-83528 (Para. 4.5.16)

### Physical Properties

Property	Min.	Max.	Value	Test Method
Specific Gravity (+/-0.25)			3.5	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)			65	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.		300	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.		200	ASTM D412 (MIL Para. 4.5.6)
	Max.		500	
Tear Strength (PPI)	Min.		50	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.		45	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.		+160	MIL-DTL-83528 (Table 1-Type E)
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