

Techsil Conductive Elastomer LTE-30

LTE-30 is a Shore A 75 durometer hardness fluorosilicone elastomer filled with silver plated copper particles as the conductive and shielding media. This material has excellent shielding properties and conductivity and meets the requirements of MIL-DTL-83528 type C. LTE-30 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-30 is an excellent choice for military applications in non-corrosive environments requiring a high level of EMP resistance. This unique material is recommended for applications that require low and high temperature performance in contact with jet and automotive fuels, many solvents, and engine oils. 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:	Fluorosilicone
Filler Material:	Silver Plated Copper
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		120	
100 MHz		126	
600 MHz		125	
2 GHz		143	
10 GHz		126	

Electrical Stability

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)		.010	
After Exposure to EMP (ohm-cm) (0.9 KAmper/inch of Perimeter)	Max.	.015	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)		75	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	180	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	100	ASTM D412 (MIL Para. 4.5.6)
	Max.	300	
Tear Strength (PPI)	Min.	35	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	35	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+125	MIL-DTL-83528 (Table 1-Type C)
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