Techsil Conductive Elastomer LTE-65

LTE-65 is a Shore A 75 durometer hardness silicone elastomer filled with silver plated nickel particles as the conductive and shielding media. This material has excellent shielding properties and conductivity and meets the requirements of MIL-DTL-83528 type L. LTE-65 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-65 is an excellent choice for military applications requiring a high level of EMP resistance and EMI/RFI shielding. The performance of this material is best realized in non-corrosive environments. 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 Plated Nickel
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		120	
100 MHz		127	
600 MHz		126	
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.	.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)		.005	
After Exposure to EMP (ohm-cm) (0.9 KAmp/inch of Perimeter)	Max.	.010	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.	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 D395 (MIL Para. 4.5.7)
Upper Operating Temp. (^{0}C)	Max.	+125	MIL-DTL-83528 (Table 1-Type L)
Lower Operating Temp (^{0}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

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Performance of conductive elastomers vary from one application to another. Leader Tech, Inc. cannot guarantee that the above specifications will be met in your specific application. If you need assistance in testing your application, please do not hesitate to contact Leader Tech for further information.