Techsil Conductive Elastomer LTE-35

LTE-35 is a Shore A 75 durometer hardness fluorosilicone 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 F. LTE-35 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 unique material is most noted for applications that require higher physical properties, 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
Color:	Tan (Custom colors available upon request)

Electrical Properties

			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		118	
100 MHz		127	
600 MHz		124	
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)		.002	
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.	250	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	100	ASTM D412 (MIL Para. 4.5.6)
	Max.	300	
Tear Strength (PPI)	Min.	40	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	60	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (^{0}C)	Max.	+160	MIL-DTL-83528 (Table 1-Type F)
Lower Operating Temp (^{0}C)	Min.	-65	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

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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.

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