

Electrically Conductive Elastomer CE-016



CE-016 is Shore A 70 durometer hardness Fluorosilicone elastomer filled with Passivated silver plated aluminum particles as the conductive and shielding media. **CE-016** has good shielding properties and conductivity along with excellent sealing at temperature extremes; it is ozone resistant and has a long shelf life. **CE-016** is formulated to provide increased corrosion resistance with Aluminum and other substrates in harsh environments. **CE-016** is recommended for applications where there are dissimilar mating surfaces, the presence of salt fog or other harsh uncontrolled environments. This material can be supplied as, molded parts, extruded shapes, and die cut parts or as standard sheet stock. Contact our main office for additional information regarding your specific application.

Elastomer:	Fluorosilicone
Filler Material:	Passivated Silver Plated Aluminum
Color:	Tan

Electrical Properties

Test Method

Volume Resistivity (ohm-cm) (as supplied)	Max.	.012	MIL-DTL-83528F	(Para. 4.5.11)
Shielding Effectiveness (db)	Min.	110	MIL-DTL-83528F	(Para. 4.5.12)
100 MHz (E-Field)				
500 MHz (E-Field)				
2 GHz (Plane Wave)				
10 GHz (Plane Wave)				

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.015	MIL-DTL-83528F	(Para. 4.5.15)
After Break (ohm-cm)	Max.	.015	MIL-DTL-83528F	(Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.015	MIL-DTL-83528F	(Para. 4.5.13)
After Vibration (ohm-cm)		.012		
After Exposure to EMP (ohm-cm) (0.9 KAMP/inch of Perimeter)	Max.	.015	MIL-DTL-83528F	(Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		2.0	ASTM D792	(MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		70	ASTM D2240	(MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	180	ASTM D412	(MIL Para. 4.5.6)
Elongation (%)	Min.	60	ASTM D412	(MIL Para. 4.5.6)
	Max.	260		
Tear Strength (PPI)	Min.	30	ASTM D624	(MIL Para. 4.5.8)
Compression Set (%)	Max.	30	ASTM D395	(MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+160		
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-83528F	(Para. 4.5.17)

SUR=Survivable NS=Not Survivable

Note: For compression data please contact sales@nedc.com or refer to www.nedc.com.

Performance of conductive elastomers varies on application. NEDC Sealing Solutions cannot guarantee that the above specifications will be met in your application. If you need assistance in testing your application, do not hesitate to contact us for further information.

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