

Electrically Conductive Elastomer

CE-008



CE-008 is a Shore A 40 durometer hardness silicone elastomer filled with silver plated nickel particles as the conductive and shielding media. **CE-008** has good shielding properties and conductivity. This material has excellent sealing at temperature extremes, is ozone resistant and has a long shelf life. As a result of the lower durometer hardness, **CE-008** requires lower compression forces to achieve maximum shielding effectiveness. 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:	Silicone
Filler Material:	Silver Plated Nickel
Color:	Tan

Electrical Properties

			Test Method	
Volume Resistivity (ohm-cm) (as supplied)	Max.	.010	MIL-DTL-83528F	(Para. 4.5.11)
Shielding Effectiveness (db)	Min.	100 100 90 80	MIL-DTL-83528F	(Para. 4.5.12)
100 MHz (E-Field)				
500 MHz (E-Field)				
2 GHz (Plane Wave)				
10 GHz (Plane Wave)			MIL-STD-285	

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.015	MIL-DTL-83528F	(Para. 4.5.15)
After Break (ohm-cm)	Max.	.025	MIL-DTL-83528F	(Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.015	MIL-DTL-83528F	(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-83528F	(Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		3.5	ASTM D792	(MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		40	ASTM D2240	(MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	100	ASTM D412	(MIL Para. 4.5.6)
Elongation (%)	Min.	100	ASTM D412	(MIL Para. 4.5.6)
	Max.	300		
Tear Strength (PPI)	Min.	20	ASTM D624	(MIL Para. 4.5.8)
Compression Set (%)	Max.	35	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.	8	ASTM D575	(MIL Para. 4.5.5)
Fluid Immersion	NS	NS	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.