

Electrically Conductive Elastomer

CE-007



CE-007 is a Shore A 65 durometer hardness silicone elastomer filled with nickel-plated graphite particles as the conductive and shielding media. **CE-007** has good shielding properties and conductivity. This material has excellent sealing at temperature extremes, is ozone resistant and has a long shelf life. **CE-007** provides a good solution for a variety of commercial and military applications. This material can be supplied as, molded parts, extruded shapes, die cut parts or standard sheets. Contact our main office for additional information regarding your specific application.

Elastomer:	Silicone
Filler Material:	Nickel Plated Graphite
Color:	Dark Gray

Electrical Properties

Test Method

Volume Resistivity (ohm-cm) (as supplied)	Max.	.100	MIL-DTL-83528F	(Para. 4.5.11)
Shielding Effectiveness (db)	Min.	50 100 100 100 100	MIL-DTL-83528F MIL-STD-285	(Para. 4.5.12)
200 KHz (H-Field)				
100 MHz (E-Field)				
500 MHz (E-Field)				
2 GHz (Plane Wave)				
10 GHz (Plane Wave)				

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.200	MIL-DTL-83528F	(Para. 4.5.15)
After Break (ohm-cm)	Max.	.200	MIL-DTL-83528F	(Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.200	MIL-DTL-83528F	(Para. 4.5.13)
After Vibration (ohm-cm)		.100		
After Exposure to EMP (ohm-cm) (0.9 KAmper/inch of Perimeter)	Max.	.100	MIL-DTL-83528F	(Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		2.1	ASTM D792	(MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		65	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.	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.	8	ASTM D575	(MIL Para. 4.5.5)
Fluid Immersion		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.