

Electrically Conductive Elastomer CE-012

CE-012 is Shore A 85 durometer elastomer filled with silver plated copper particles dispersed in a silicone matrix. **CE-012** has excellent shielding properties and conductivity. **CE-012** is qualified of MIL-DTL-83528F **Type K** material. **CE-012** material has excellent sealing at temperature extremes, is ozone resistant and has a long shelf life. **CE-012** can be supplied as molded parts, extruded shapes, fabricated, die cut parts and sheet stock.

Please contact our inside sales department for more information.

Elastomer:	Silicone
Filler Material	Ag/Cu
Color:	Tan

Shielding Effectiveness(dB)

Test Method

Shielding Effectiveness (db)			
100 MHz (E-Field)	Min.	120	MIL-DTL-83528F (Para. 4.5.12) MIL-STD-285
500 MHz (E-Field)		120	
2 GHz (Plane Wave)		120	
10 GHz (Plane Wave)		120	

Electrical Properties

Volume Resistivity (ohm-cm)(as received)	Max.	.005	MIL-DTL-83528F (Para. 4.5.11)
After Heat Aging (ohm-cm)	Max.	.010	MIL-DTL-83528F (Para. 4.5.15)
After Break (ohm-cm)	Max.	.010	MIL-DTL-83528F (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.010	MIL-DTL-83528F (Para. 4.5.13)
After Vibration (ohm-cm)		.005	
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)		3.6	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		85	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	400	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.	35	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+125	
Lower Operating Temp. (°C)	Min.	-45	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.	2.5	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.