

# Electrically Conductive Elastomer CE-002-HT



**CE-002-HT** is Shore A, 65 durometer hardness silicone elastomer filled with silver plated aluminum particles as the conductive and shielding media. **CE-002-HT** has excellent shielding properties and conductivity and meets the requirements of MIL-DTL-83528F **Type B** material. This material has excellent sealing at temperature extremes, is ozone resistant, has a long shelf life and exhibits excellent high and low temperature capabilities. 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 Aluminum
Color:	Tan

## Electrical Properties

## Test Method

Volume Resistivity (ohm-cm) (as supplied)	Max.	.008	MIL-DTL-83528F	(Para. 4.5.11)
Shielding Effectiveness (db)	Min.		MIL-DTL-83528F MIL-STD-285	(Para. 4.5.12)
100 MHz (E-Field)		115		
500 MHz (E-Field)		110		
2 GHz (Plane Wave)		105		
10 GHz (Plane Wave)		100		

## Electrical Stability

After Heat Aging (ohm-cm)	Max.	.010	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.	.012	MIL-DTL-83528F	(Para. 4.5.13)
After Vibration (ohm-cm)		.008		
After Exposure to EMP (ohm-cm) (0.9 KAMP/inch of Perimeter)	Max.	.010	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)		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.	42	ASTM D624	(MIL Para. 4.5.8)
Compression Set (%)	Max.	30	ASTM D395	(MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+200		
Lower Operating Temp (°C)	Min.	-65	ASTM D1329	(MIL Para. 4.5.14)
Compression Deflection (%)	Min.	3.5	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.

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