

Electrically Conductive Elastomer CE-006



CE-006 is Shore A 70 durometer elastomer silver plated aluminum particles dispersed in a Fluorosilicone matrix, capable of 90 dB of plane wave shielding effectiveness at 10 GHz, with a continuous use temperature range of -55°C to +160°C, and resistant to solvents and jet fuels. **CE-006** has good shielding properties and is qualified to MIL-DTL-83528F **Type D material**. **CE-006** has excellent sealing at temperature extremes, is ozone resistant and has a long shelf life. **CE-006** provides good corrosion resistance with Aluminum and other substrates; it is recommended for applications where there are dissimilar mating surfaces, the presence of salt fog, or in uncontrolled environments. **CE-006** can be supplied as molded parts, extruded shapes, die cut, fabricated parts or sheets. Contact our main office for additional information regarding your specific application.

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

Shielding Properties

Test Method

Shielding Effectiveness (db)	Min.		MIL-DTL-83528F (Para. 4.5.12) MIL-STD-285
100 MHz (E-Field)		110	
500 MHz (E-Field)		105	
2 GHz (Plane Wave)		100	
10 GHz (Plane Wave)		100	

Electrical Properties

Volume Resistivity (ohm-cm) (as supplied)	Max.	.012	MIL-DTL-83528F (Para. 4.5.11)
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.	35	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 (TR-10/TR-70) (°C)		-55/-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.