



## ElectroSeal EcE 89

**ElectroSeal EcE 89** is a Silver Aluminum filled Fluorosilicone elastomer. **EcE 89** has excellent shielding properties and conductivity. This material will survive temperature extremes, is ozone resistant and has a long shelf life. It is recommended for applications where there are high shielding requirements, including electromagnetic pulses.

**EcE 89** is MIL-G-83528 type D approved material and has resistance to petroleum oils and fuels (Mil-G-83528 Fluid immersion). **EcE 89** has also been tested for galvanic compatibility per MIS-47057 and is an excellent match for Chromated Al, Tin plated steel, zinc-plated steel, and stainless steel.

This material can be Molded, Extruded, or molded into sheets and then Die Cut. See our catalog for standard shapes available, or provide information about your needs for a custom profile.

Elastomer :	Fluorosilicone
Filler Material:	Silver / Aluminium
Color:	Blue

Electrical Properties		Test Method	
Volume Resistivity (ohm-cm) (as supplied)	Max.	0.007	MIL-G-83528 (PARA 4.6.11)
Shielding Effectiveness (dB)	Min.		MIL-G-83528 (PARA 4.6.12) MIL-STD-285
200 KHz (H-Field)		70	
100 MHz (E-Field)		110	
500 MHz (E-Field)		105	
2 GHz (Plane Wave)		100	
10 GHz (Plane Wave)	100		

Electrical Stability			
After Heat Aging (ohm-cm)	Max.	0.01	MIL-G-83528 (PARA 4.6.15)
After Break (ohm-cm)	Max.	0.015	MIL-G-83528 (PARA 4.6.9)
During Vibration (ohm-cm)	Max.	0.007	MIL-G-83528 (PARA 4.6.13)
After Vibration (ohm-cm)		0.007	
After Exposure to EMP (ohm-cm) (0.9 K Amp/inch of perimeter)	Min.	0.008	MIL-G-83528 (PARA 4.6.16)

Physical Properties			
Specific Gravity (+/-0.25)		2.2	ASTM D792
Hardness (Shore A) (+/- 7)		70	ASTM D2240
Tensile Strength (PSI)		190	ASTM D412
Elongation (%)	Min.	60	ASTM D412
	Max.	250	
Tear Strength (PPI)	Min.	35	ASTM D624 (DIE C)
Compression Set (%)	Max.	30	ASTM D395
Upper Operating Temp. (C)	Max.	160	
Lower Operating Temp. (C)	Min.	-55	ASTM D1329
Compression/Deflection (%)	Min.	3.5	ASTM D575
Fluid Immersion	Survivable		MIL-G-83528 (Para 4.6.17)

EMI shielding performance of conductive elastomers varies from one application to another. Laird Technologies can not guarantee that the above specifications will be met in your application. If you need assistance in testing your application, do not hesitate to contact Laird Technologies' World Compliance Center to arrange EMI testing.