

**LAIRD™ ELECTROSEAL™ ECE93**

The ELECTROSEAL™ ECE93 Electrically Conductive Elastomer from Laird Performance Materials is a nickel coated graphite filled silicone elastomer. It has excellent EMI shielding at temperature extremes, ozone and pressure resistant, and has a long shelf life. This material is designed for molded and extruded EMI gaskets, or can be formed into sheets and then die cut.

**FEATURES AND BENEFITS**

- Nickel coated graphite filled silicone with balance performance
- Utilized both conductive and non-conductive materials
- Retain strong EMI protection
- Available for both molding and extrusion
- RoHS compliant and halogen free per IEC-61249-2-21 standard

**MARKETS**

- Telecom
- Datacom
- Industrial
- Automotive

**CHARACTERISTICS**

Item	Unit	Typical Value <sup>^1</sup>	Test Method
Base elastomer		Silicone	-
Conductive filler		Nickel coated graphite	-
Color	-	Black	Visual inspection
Density	g/cm <sup>3</sup>	1.9	ASTM D792
Hardness, Shore A <sup>^2</sup>	-	65	ASTM D2240
Volume resistivity	Ohm-cm	0.02	MIL-DTL-83528E Para 4.5.11
Tensile strength	MPa	1.5	ASTM D412
Elongation	%	150	ASTM D412
Tear strength	N/mm	17	ASTM D624(die C)
Compression set	%	10	ASTM D395(B) 22hrs@125°C
Outgassing, TML	%	0.1	ASTM E595
Outgassing, CVCM	%	0.02	ASTM E595
Shielding Eff <sup>^3</sup>	dB	100	MIL-DTL-83528E para 4.5.12
Operation temp.	°C	-40 to 155	-
Flammability	-	HB	UL94

<sup>^1</sup>: Typical values above are based on standard test methods.

<sup>^2</sup>: This will be varied with part size and processing process.

<sup>^3</sup>: Average SE @10GHz

**SHELF LIFE**

12months at 23°C/60%R.H.

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