

# **ELECTROSEAL™ ECE158**

# **Electrically Conductive Elastomer**

#### LAIRD™ ELECTROSEAL™ ECE158

The ELECTROSEAL™ ECE158 Electrically Conductive Elastomer from Laird Performance Materials is a silver coated copper 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**

- Silver coated copper filled silicone with balance performance
- Low hardness
- 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		Silver coated copper	-
Color	-	Tan	Visual inspection
Density	g/cm³	3.3	ASTM D792
Hardness, Shore A <sup>2</sup>	-	55	ASTM D2240
Volume resistivity	Ohm-cm	0.007	MIL-DTL-83528E Para 4.5.11
Tensile strength	MPa	1	ASTM D412
Elongation	%	70	ASTM D412
Tear strength	N/mm	5.5	ASTM D624(die C)
Compression set	%	22	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.	$^{\circ}\!\mathbb{C}$	-40 to 155	-

^1: Typical values above are based on standard test methods.

# SHELF LIFE

12months at 23°C/60%R.H.



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

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