

LAIRDTM ELECTROSEALTM ECE158

The ELECTROSEALTM ECE158 Electrically Conductive Elastomer from Laird Performance Materials is a silver 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.

FEATURES AND BENEFITS

- Tan color
- Available for both molding and extrusion
- UL94V0 equivalent
- RoHS compliant and halogen free per IEC-61249-2-21 standard

MARKETS

- Telecom
- Datacom
- Industrial
- Automotive

CHARACTERISTICS

Item	Unit	Typical Value ^{^1}	Test Method
Base elastomer		Silicone	-
Conductive filler		Silver copper	-
Color	-	Tan	Visual inspection
Density	g/cm3	3.3	ASTM D792
Hardness, Shore A ^{^2}	-	52	ASTM D2240
Volume resistivity	Ohm-cm	0.011	MIL-DTL-83528E Para 4.5.10
Tensile strength	MPa	0.8	ASTM D412
Elongation	%	81	ASTM D412
Tear strength	N/mm	6.9	ASTM D624 (die C)
Compression set	%	30	ASTM D395(B) 72hrs@100°C
Outgassing, TML	%	0.1	
Outgassing, CVCM	%	0.02	
Shielding Eff ^{^3}	dB	100	MIL-DTL-83528E para 4.5.12
Operation temp.	°C	-40 to 155	-
Flammability ^{^4}	-	V0 equivalent	UL94

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

^{^2}: Typical hardness value; this will be varied with part size and processing process.

^{^3}: Follow the standard of MIL-DTL-83528E PARA 4.5.12, average SE @10GHz

^{^4}: Flame test is conducted on samples with 1.5 mm aluminum plates on both sides.

SHELF LIFE

12months at 23°C/60%R.H.

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