ELECTROSEAL™ ECE93
Electrically Conductive Elastomer

LAIRD™ ELECTROSEAL™ ECE93

The ELECTROSEAL™ ECE93 Electrically Conductive Elastomer from Laird Performance Materials is a nickel 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.

FEATURES AND BENEFITS

- Black color
- Available for both molding and extrusion
- UL94V0
- 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		Nickel graphite	-
Color	-	Black	Visual inspection
Density	g/cm3	1.9	ASTM D792
Hardness, Shore A[^2]	-	63	ASTM D2240
Volume resistivity	Ohm-cm	0.06	MIL-DTL-83528E Para 4.5.10
Tensile strength	MPa	1.2	ASTM D412
Elongation, %	%	92.5	ASTM D412
Tear strength	N/mm	8.1	ASTM D624 (die C)
Compression set	%	30	ASTM D395(B) 72hrs@100℃
Outgassing, TML	%	0.1	
Outgassing, CVCM	%	0.02	
Shielding Eff[^3]	dB	100	MIL-DTL-83528E para 4.5.12
Operation temp.	℃	-40 to 155	-
Flammability	-	HB	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

SHELF LIFE

12months at 23℃/60%R.H.

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