

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

| Unit | Typical Value ^[^1] | Test Method |
|--------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| | Silicone | - |
| | Nickel graphite | - |
| - | Black | Visual inspection |
| g/cm3 | 1.9 | ASTM D792 |
| - | 63 | ASTM D2240 |
| Ohm-cm | 0.06 | MIL-DTL-83528E Para 4.5.10 |
| MPa | 1.2 | ASTM D412 |
| % | 92.5 | ASTM D412 |
| N/mm | 8.1 | ASTM D624 (die C) |
| % | 30 | ASTM D395(B) 72hrs@100℃ |
| % | 0.1 | |
| % | 0.02 | |
| dB | 100 | MIL-DTL-83528E para 4.5.12 |
| °C | -40 to 155 | - |
| - | HB | UL94 |
| | - g/cm3 - Ohm-cm MPa % N/mm % % % % dB | Silicone Nickel graphite - Black g/cm3 1.9 - 63 Ohm-cm 0.06 MPa 1.2 % 92.5 N/mm 8.1 % 0.01 % 0.02 dB 100 °C -40 to 155 |

^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°C /60%R.H.

EM-ENSL-DS-ECE93_0322

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