# ELECTROSEAL™ ECE81
## Electrically Conductive Elastomer

## LAIRD™ ELECTROSEAL™ ECE81

The ELECTROSEAL™ ECE81 Electrically Conductive Elastomer from Laird Performance Materials is a silver aluminum 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
- 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 aluminum | - |
| Color | - | Tan | Visual inspection |
| Density | g/cm3 | 2 | ASTM D792 |
| Hardness, Shore A[^2] | - | 68 | ASTM D2240 |
| Volume resistivity | Ohm-cm | 0.006 | MIL-DTL-83528E Para 4.5.10 |
| Tensile strength | MPa | 1.8 | ASTM D412 |
| Elongation | % | 110 | ASTM D412 |
| Tear strength | N/mm | 13.2 | 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 | - | V0 | 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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