EMI Shielding Tape with Conductive Adhesive (2800 Series)

Tapes are an economical EMI shielding solution for a variety of commercial uses. The tapes are available in copper or aluminum backed with conductive pressure-sensitive adhesives.

Copper tape meets the requirements of MIL-T-47012 for corrosion resistance. Typical properties are shown in Table 1.

Copper tape is available with a non-conductive adhesive for applications requiring surface conductivity only. Standard length rolls and die-cut custom shapes can be ordered. Other types of shielding tape are available by request.



Typical Applications for Shielding Tapes

Provide a low impedance connection between a braided cable shield and the metal connector backshell in molded cables. An effective EMI-shielded assembly can be achieved without soldering the tape to the braid or backshell.

- EMI radiation measurement trouble-shooting, using tape to shield ventilation slots or seam gaps.
- Provide electrical continuity in seams of EMI shielding rooms and electronic enclosures.
- Supply electrical contact to surfaces that can't be soldered, such as conductive plastic or aluminum.
- Provide EMI shielding for cables when tape is wrapped around the cable. (An overlap is recommended.)
- Provide ESD shielding.
- Provide corrosion-resistant ground contact points.
- Fabric tape available where weight and flexibility are important, such as for wrapping cables.

Properties — Table 1

| | Copper Foil with Conductive Acrylic Adhesve | Aluminum Foil with Conductive Acrylic Adhesve | Nickel Copper with Conductive Adhesive |
|------------------------------|---|---|--|
| Color | Copper | Silver | Gray |
| Tempurature Resistance | 155 degress C | _ | -40 C to +110 C |
| Resistivity through Adhesive | 10 milliohms/square inch | 40 milliohms/square inch | 50 milliohms/square inch |
| Elongation at Break | 4% | 5% | _ |
| Backing | .0014" (1oz) Copper Foil | .0018" Aluminum Foil | 0.003" conductive fabric |
| Adhesive | Conductive Acrylic | Conductive Acrylic | _ |
| Inter Liner | Polyethelene Coated Paper Line | _ | _ |
| Adhesive (thickness) | _ | _ | .002" |
| Peel Strength | 35 oz./inch of width | 35 oz./inch of width | 51 oz./inch of width |
| Breaking Strength | 25 lbs./inch of width | 15 lbs./inch of width | _ |
| RFI attenuation | - | _ | 90 – 100 dB from 20 MHz to 10 GHz |
| Tape Dimensions (Max) | - | _ | Width 1000mm, Length 100 M |