



DuraWave 33

RUGGEDIZED CABLE ASSEMBLIES

DuraWave™ RF cable assemblies utilize a rugged armored construction to prevent external stresses from being introduced into the coaxial transmission line. These cables are designed for on-site field testing, manufacturing environments and the testing laboratory.

BENEFITS

- Crush and torque resistant armoring for enhanced durability and reliability
- Injection molded flex reliefs to reduce stresses and excessive bending
- Weather resistant
- Low VSWR
- Amplitude and phase stable with flexure

400-0679-00 3.5 MM (M) TO 3.5 MM (M) CABLE ASSEMBLY, 1M

PERFORMANCE SPECIFICATIONS

| ELECTRICAL CHARACTERISTICS | DC – 33GHz |
|--|----------------------------|
| Coax Impedance, ohms | 50 ± 1.5 |
| Typical Velocity of Propagation, % | 80 |
| Shielding Effectiveness thru 20GHz, dB | 100 |
| Typical Flexure Phase Stability, 360° loop around 4.5" diameter mandrel, degrees of phase change | ± 4.5° thru Max. Frequency |
| Max. Structural VSWR thru Max. Frequency (w/ connector) | 1.3:1 |
| Max. Return Loss thru Max. Frequency (w/ connector), dB | -18 |
| Typical Insertion Loss thru Max. Frequency, dB | -2.5 |
| Typical Insertion Loss Stability, 360° loop around 4.5" diameter mandrel, dB | ± 0.05 |

| MECHANICAL CHARACTERISTICS | |
|---|------------|
| Inside Minimum Cable Bend Radius (static), in | 1 |
| Inside Minimum Cable Bend Radius (dynamic), in | 2 |
| Flexural Durability, Flex Cycles (2" Bend Radius) | >1000 |
| Temperature Range, °C | -45 to 125 |
| Crush Resistance, lbs/linear in. | >250 |
| Assembly Length, meter | 1.0 |

| CONSTRUCTION | |
|-----------------------|---|
| Center Conductor | SPC, Solid |
| Dielectric | Low Density PTFE |
| Inner Shield | SPC Flat Wire |
| Outer Shield | SPC Braid |
| Crush Resistant Armor | Stainless Steel Coil with Stainless Steel Braid |
| Jacket | Polyolefin, 125°C |

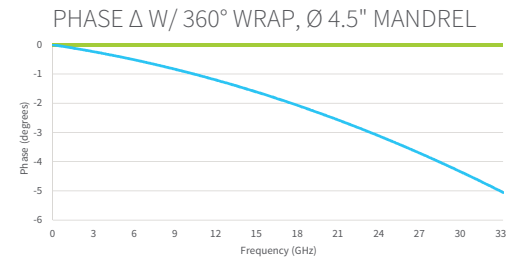
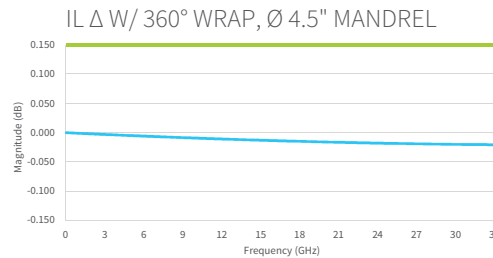
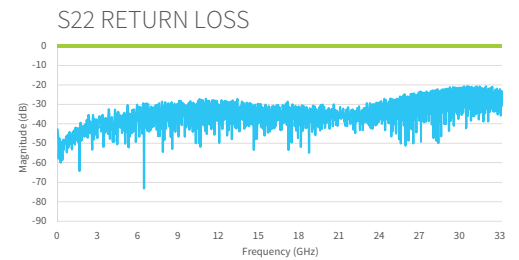
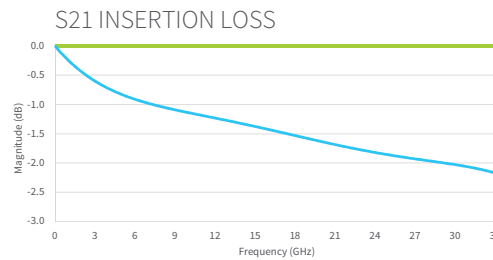
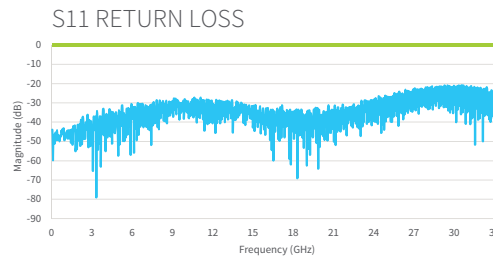
| REGULATORY | All materials comply with the EU RoHS directive EU/2015/863 and published exemptions. |
|------------|---|
|------------|---|



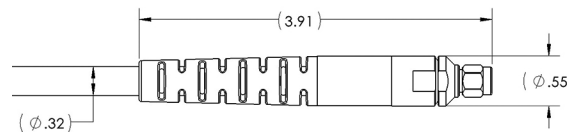
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PERFORMANCE SPECIFICATIONS

TYPICAL S-PARAMETER PERFORMANCE AND TYPICAL INSERTION LOSS AND PHASE STABILITY PERFORMANCE



CONNECTOR AND FLEX RELIEF DIMENSIONS



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