



DuraWave PS43

RUGGEDIZED CABLE ASSEMBLIES

DuraWave™ PS cable assemblies are phase and magnitude stable RF cables designed for on-site field testing, manufacturing environments and the testing laboratory. They utilize a rugged armored construction to prevent external stresses from being introduced into the coaxial transmission line. Their coaxial construction utilizes air-enhanced PTFE dielectrics and precision RF connectors to deliver optimal performance at their specified frequency ranges. DuraWave PS cables are optimal for a variety of instrumentation such as Network Analyzers, Spectrum Analyzers, and wherever accurate measurements demand excellent signal stability and low signal loss.

400-0803-00 2.92 MM (M) TO 2.92 MM (F) CABLE ASSEMBLY, 0.6M

PERFORMANCE SPECIFICATIONS

| ELECTRICAL CHARACTERISTICS | DC - 43.5GHz |
|---|---|
| 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 | ± 7° thru Max. Frequency |
| Guaranteed Flexure Phase Stability, 360° loop around 4.5" diameter mandrel, degrees of phase change | ± 10° 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 at Max. Frequency, dB | -1.8 |
| Guaranteed Insertion Loss at Max. Frequency, dB | -2 |
| Typical Insertion Loss Stability, 360° loop around 4.5" diameter mandrel, dB | ± 0.05 |
| Guaranteed Insertion Loss Stability, 360° loop around 4.5" diameter mandrel, dB | ± 0.15 |
| 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 | 0.6 |
| 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 |

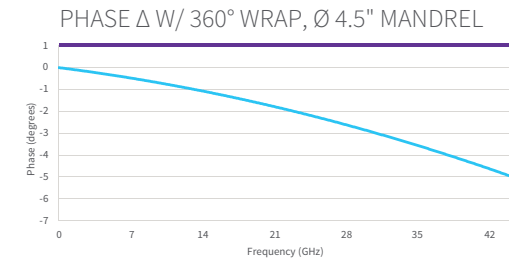
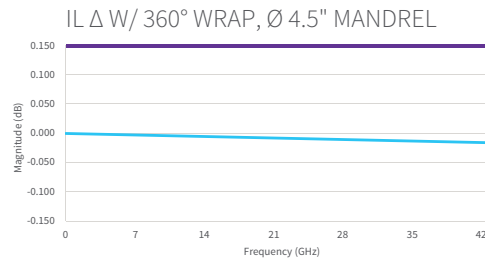
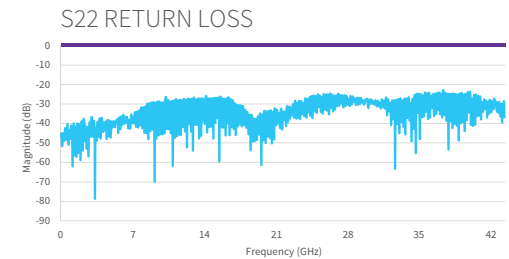
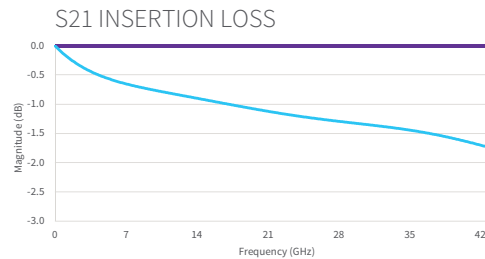
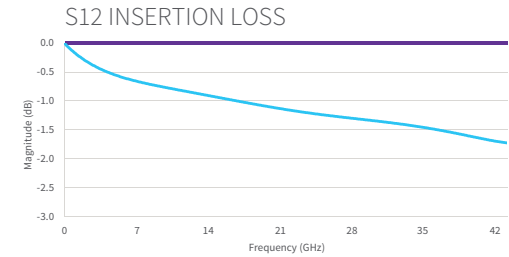
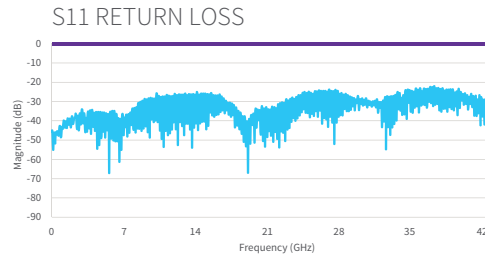
REGULATORY All materials comply with the EU RoHS directive EU/2015/863 and published exemptions.



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PERFORMANCE SPECIFICATIONS

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



DuraWave PS43

RUGGEDIZED CABLE ASSEMBLIES

BENEFITS

- Guaranteed phase and insertion loss stability with flexure
- Low Loss and Low VSWR
- Durable but flexible
- Crush and torque resistant armoring for enhanced reliability
- Injection molded flex reliefs to reduce stresses and excessive bending
- Weather resistant
- Temperature rated for 125°C continuous use

CONNECTOR AND FLEX RELIEF DIMENSIONS

