




HSB42® Series

26.5 GHz Test Cable Assemblies with Excellent Phase and Amplitude Stability vs. Flexure

FEATURES

- RoHS Compliant 
- Very flexible with bend radius of 1.95"
- Good performance even after 20,000 flex cycles
- Available with stainless steel armor
- Phase Stability vs. Flexure: $\pm 2.95^\circ$ @ 26.5 GHz
(When wrapped 360° around a 1.95" radius mandrel)
- Cable Insertion Loss: -0.79 dB per Ft @ 26.5 GHz
- Excellent Amplitude Stability: $\leq \pm 0.1$ dB through 26.5 GHz

ELECTRICAL SPECIFICATIONS

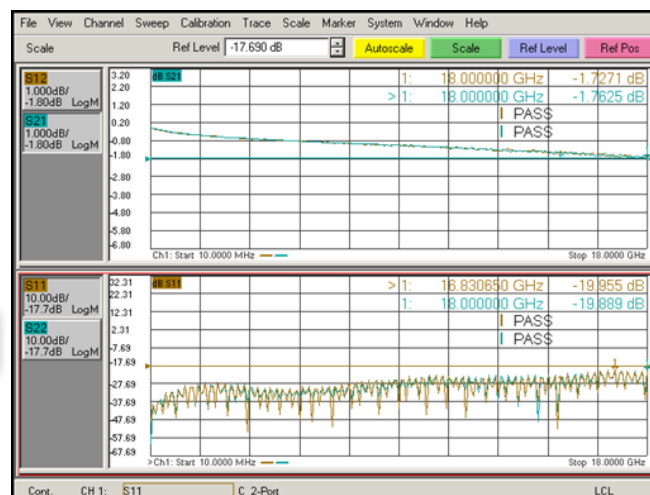
| | | | | | |
|--|------------|------------|------------|---------|------------|
| Max Frequency (GHz) | 26.5 | | | | |
| Capacitance (pF/Ft) | 29.4 | | | | |
| Velocity Propagation (%) | 70 | | | | |
| RF Leakage @ 18 GHz (dB) | <-95 | | | | |
| Time Delay (ns/Ft) | 1.40 | | | | |
| Impedance (Ohms) | 50 | | | | |
| Frequency (GHz) | 2 | 6 | 10 | 18 | 26.5 |
| Power CW (Watts) | 420 | 215 | 140 | 125 | 75 |
| Phase Stability vs. Flexure ($^\circ$) | ± 0.22 | ± 0.67 | ± 1.11 | ± 2 | ± 2.95 |

MECHANICAL SPECIFICATIONS

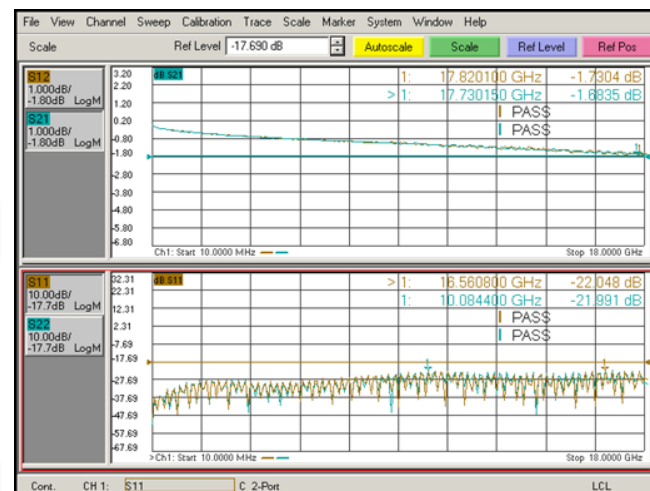
| | |
|---|------------|
| Cable Max Dia. (Inch) | 0.195 |
| Min. bend radius (Inch) | 1.0 |
| Recommend Bend Radius (Inch) | 1.95 |
| Raw Cable Temperature Range ($^\circ$ C) | -55 to +85 |

MATERIALS AND FINISHES

| DESCRIPTION | MATERIALS | FINISH OR COLOR |
|------------------|-----------------|-----------------|
| Cable Jacket | PVC | Blue |
| Marker | Mil-I-23053 | White |
| Contacts | BeCu | Gold Plated |
| Insulators | PTFE | None |
| Connector Bodies | Stainless Steel | Passivated |
| Connector Nuts | Stainless Steel | Passivated |
| Gasket | Silicon Rubber | A-A-59588 |



Test #1: SMA Male to SMA Male, 30 inches, DC - 26.5GHz



Test #2 SMA Male to SMA Male, 30 inches, DC - 26.5GHz

HOW TO ORDER: HSB42-XX-XX-L***

***Example: HSB42-S1-S2-24

1. Cable Type
2. Connectors: (A&B) SMA Male = S1
SMA Female = S2
3. Length in Inches L = Inches