

HLL150A® Series

40 GHz Ultra Low Loss Flexible Cable Assemblies with Excellent Phase Stability vs. Flexure & Temperature

FEATURES

- RoHs Compliant RoHS
- Low Loss, Low VSWR, High Reliability
- Phase Stable over Temp: 500ppm Max @ -40° C ~ $+85^{\circ}$ C
- Phase Stability Vs. Flexure: \pm 8° @ 40 GHz (When wrapped 360° around a 2" diameter mandrel)
- VA Armor: With good results in Resist compression, Resist torsion, Waterproof and Dustproof.
- Cable Insertion Loss: -.75 dB per Ft @ 40 GHz
- Amplitude Stability: $< \pm 0.4$ dB through 40 GHz

ELECTRICAL SPECIFICATIONS

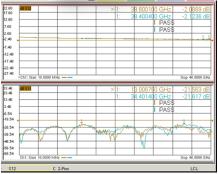
Max Frequency (GHz)	40				
Capacitance (pF/Ft)	24				
Velocity Propagation (%)	83				
RF Leakage @ 18 GHz (dB)	<-100				
Time Delay (ns/Ft)	1.2				
Impedance (Ohms)	50				
Frequency (GHz)	2	6	18	26.5	40
Power CW (Watts)	420	215	125	100	75
Phase Stability vs. Flexure (°)	± 0.4	±1.2	±3.6	±5.3	±8.0

MECHANICAL SPECIFICATIONS

VA Armor Max Dia. (Inch)	0.322
Min. bend radius (Inch)	1.5
Recommend Bend Radius (Inch)	2.5
Raw Cable Temperature Range (°C)	-65 to +13

MATERIALS AND FINISHES

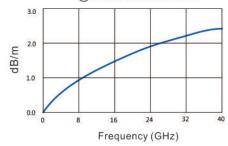
DESCRIPTION	MATERIALS	FINISH OR COLOR
Cable Jacket	PVC	Blue
VA Armor	Stainless Steel Flat Spiral	Blue
Marker	Mil-l-23053	White
Inner Conductor	Copper	Silver Plated
Inner Braid	Flat Copper Strip	Silver Plated
Outer Braid	Copper Braid	Silver Plated
Dielectric	Low Density PTFE	None
Connector Bodies/Nuts	Stainless Steel	Passivated



Test #1: 2.92mm Male to 2.92mm Male, 24 inches, DC - 40 GHz

Cable Attenuation

@ +25°C and Sea Level



Max RF Power

@ +25°C and Sea Level

200
400
200
8 16 24 32 4

Frequency (GHz)

Phase Change vs. Temperature

