



# ExpressRF 40

## RF CABLE ASSEMBLIES

ExpressRF™ is Swift Bridge Technologies' most economical RF cable product line, ideal for cost sensitive applications. These flexible and low-loss cable assemblies offer excellent overall performance to ensure accurate and repeatable measurements on the device under test (DUT). ExpressRF is available in phase matched pairs, delay matched to within 1ps, at operating frequencies of 40, 50 and 65GHz. Male and female 2.92mm, 2.4mm and 1.85mm precision RF connector configurations are available.

ExpressRF™ cable assemblies can be used in variety of applications and with instrumentation wherein accurate measurements demand low loss signal transmission. Applications may include:

- Clock Timing
- Compliance Testing
- Wireless Communication
- Probing
- Multiplexing
- Signal Routing

# 400-0917-02 2.92 MM (M) TO 2.92 MM (M) 1 PS MATCHED PAIR, 24IN

## PERFORMANCE SPECIFICATIONS

ELECTRICAL CHARACTERISTICS	DC – 40GHz
Coax Impedance, ohms	50 ± 1.5
Typical Velocity of Propagation, %	82
Shielding Effectiveness thru 20GHz, dB	>90
Typical Flexure Phase Stability, 360° loop around 4.5" diameter mandrel, degrees of phase change, 36 in length	± 6° thru Max. Frequency
Max. Structural VSWR thru Max. Frequency (w/ connector)	1.33:1
Max. Return Loss thru Max. Frequency (w/ connector), dB	-17
Typical Insertion Loss at Max. Frequency, dB	-3
Typical Insertion Loss Stability, 360° loop around 4.5" diameter mandrel, dB, 36 in length	± 0.05
Difference in Time Delay within Pair, ps	1.0

MECHANICAL CHARACTERISTICS	
Inside Minimum Cable Bend Radius (static), in	0.5
Inside Minimum Cable Bend Radius (dynamic), in	1
Flexural Durability, Flex Cycles (2" Bend Radius)	>1000
Temperature Range, °C	-45 to 125
Assembly Length, in	24

CONSTRUCTION	
Center Conductor	SPC, Solid
Dielectric	Low Density PTFE
Inner Shield	SPC Flat Wire
Outer Shield	SPC Braid
Jacket	FEP

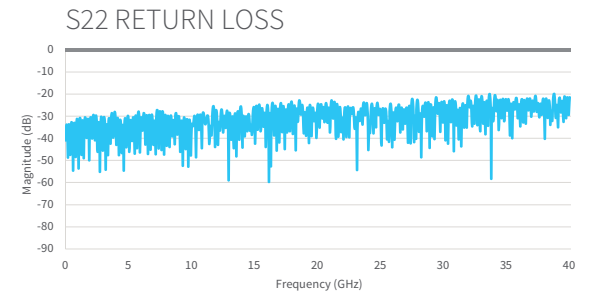
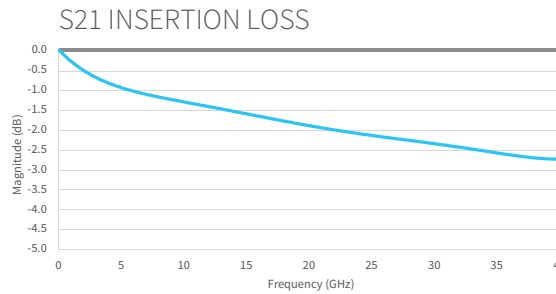
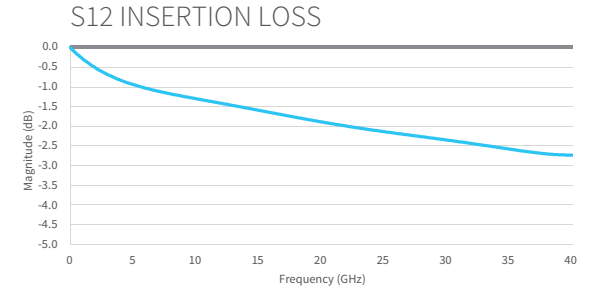
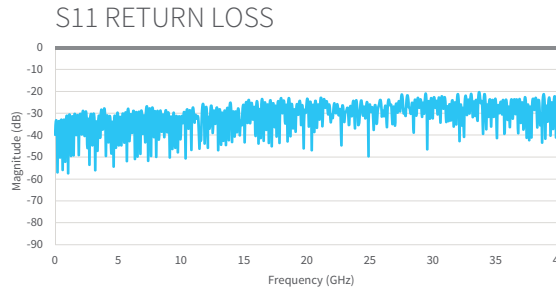
**REGULATORY** All materials comply with the EU RoHS directive EU/2015/863 and published exemptions.



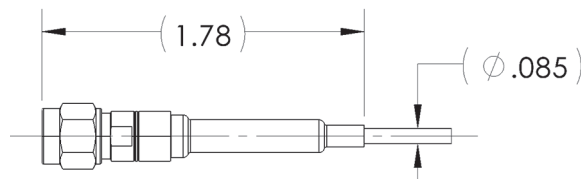
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## PERFORMANCE SPECIFICATIONS

### TYPICAL S-PARAMETER PERFORMANCE



### CONNECTOR AND HST DIMENSIONS



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