Coaxial 20W 26.5 - 40GHz 180° Hybrid Coupler

RoHS Compliant

Features

- High power handling capability up to 20W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature
- Aerospace and military applications
- High peak to average handling capability
- All specifications can be modified upon request

Electrical Specifications

Parameters		Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range		18		26.5	26.5		40	GHz
Nominal Coupling			3			3		dB
Insertion Loss			1.8	2.5		2.5	3.0	dB
Isolation		15	18		12	16		dB
Amplitude Imbalance			±0.6	±0.8		±0.7	±1.0	dB
Phase Imbalance			±6	±10		±8	±12	deg
VSWR			1.5	1.6		1.6	1.8	: 1
Power Rating	Average	20						W
	Peak	300						W
Impedance		50						Ohms
Weight		1.06						ounces
Operating Temperature		-45 to +85						℃
Input / Output Connectors		2.92mm-Female						
Material		Aluminum						
Finishing		Blue paint						

Environmental Specifications

Operational Temperature	-45 to +85℃
Storage Temperature	-55 to +125℃
Altitude	30,000 ft. (Epoxy Sealed Controlled Environment)
	60,000 ft 1.0psi min (Hermetically Sealed Un-controlled Environment)（Optional）
Vibration	25g RMS (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40℃
Shock	20G for 11 msec half sine wave, 3 axis both directions

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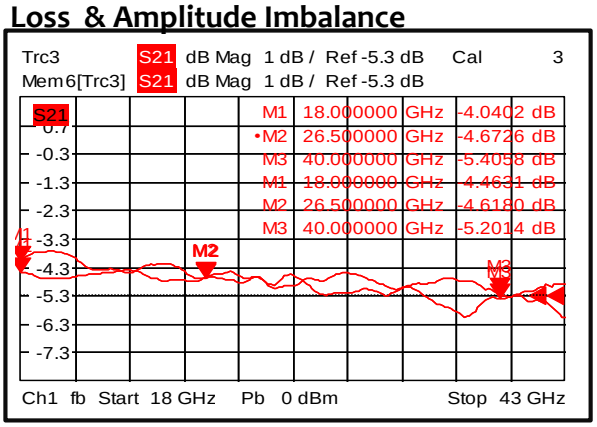
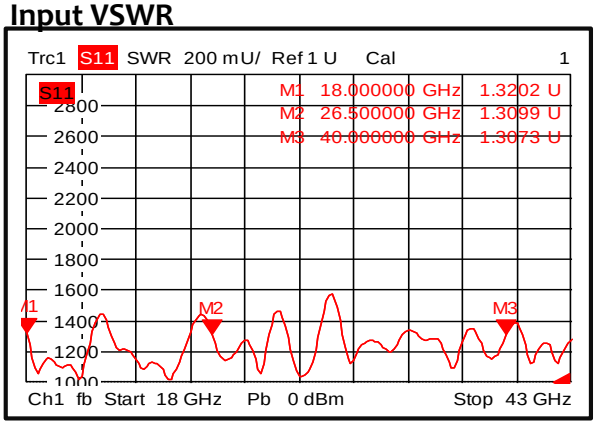
Typical Performance Plots

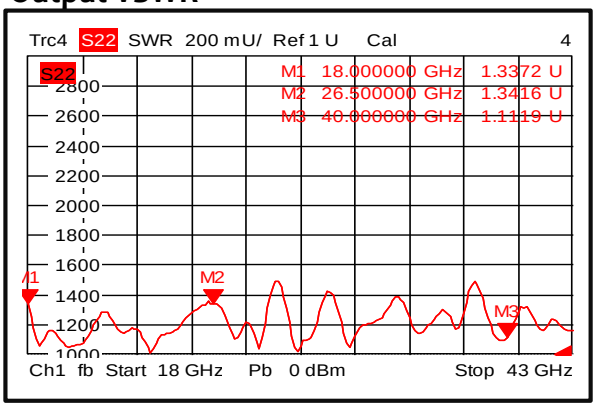
Loss & Amplitude Imbalance



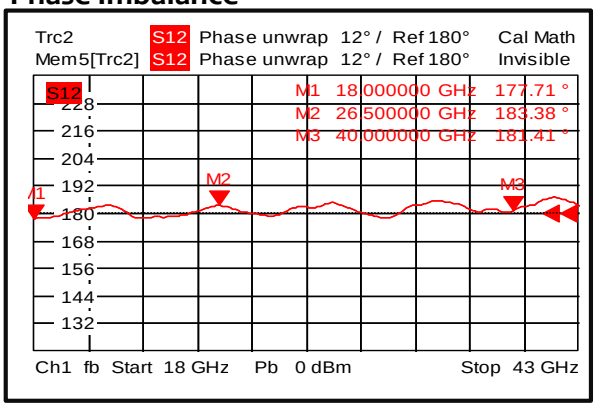
Input VSWR



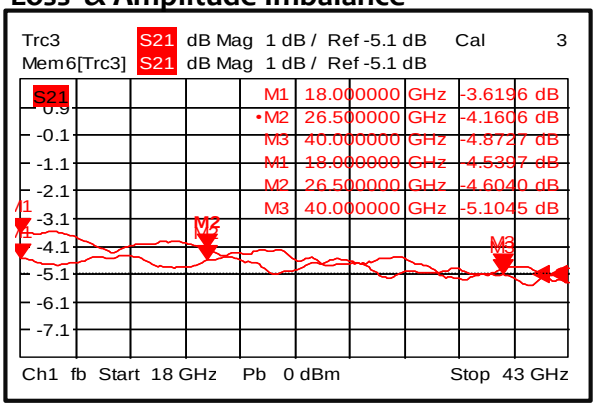
Output VSWR



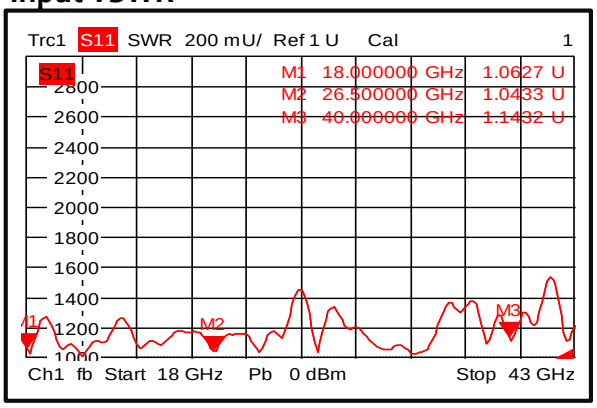
Phase Imbalance



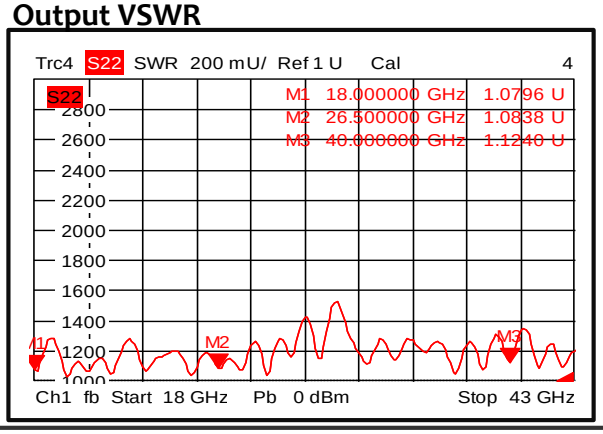
Loss & Amplitude Imbalance



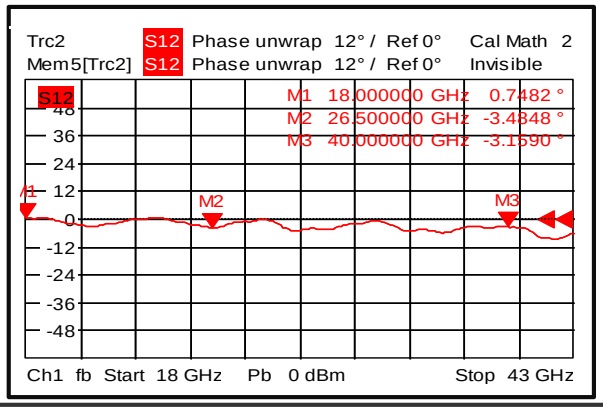
Input VSWR



Output VSWR



Phase Imbalance



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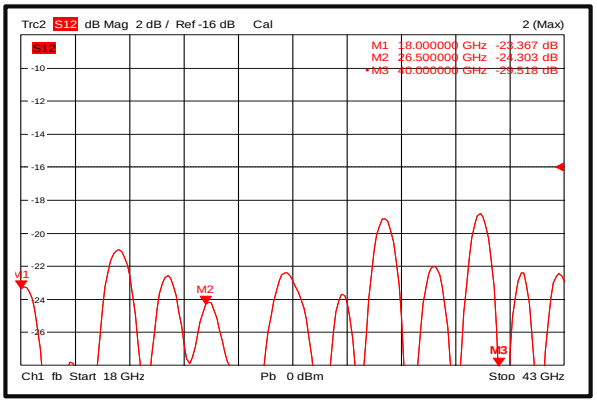
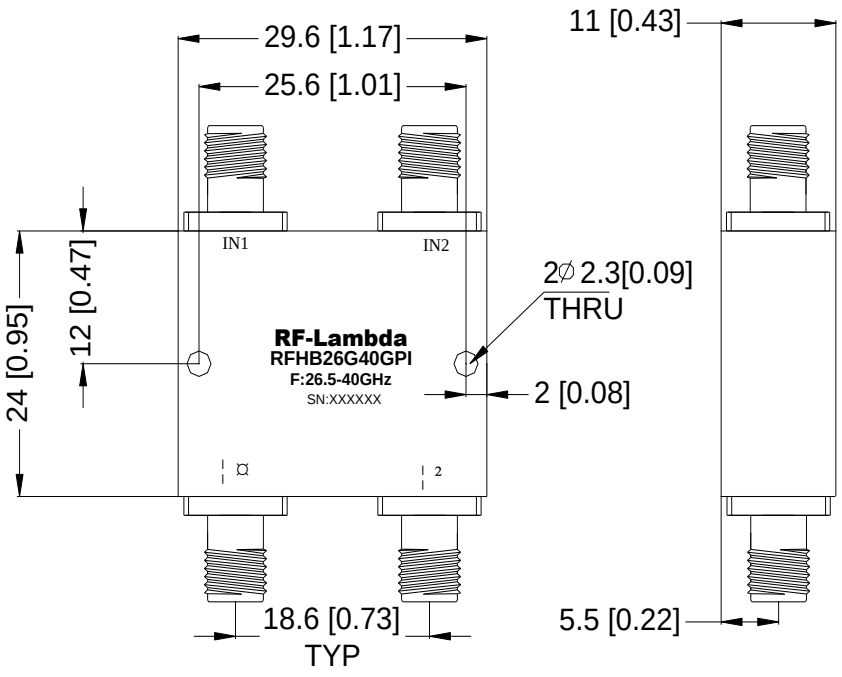
Isolation



Outline Drawing:

All Dimensions in mm [inches]
Tolerances ±0.2 [0.008]



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