

90deg Hybrid Coupler SMA Connectors From 1GHz to 18GHz Rated at 30 Watts



Hybrid Coupler

- ◆ 90° Hybrid Coupler
- ◆ Low Insertion Loss
- ◆ Low Phase Balance
- ◆ Wide Frequency Range
- ◆ Excellent Reliability

The HRT-HC(1000/18000)-90S is a 90 degree hybrid coupler that operates from 1 to 18 GHz and can handle up to 30 Watts . This SMA hybrid coupler offers 15 dB Isolation and 1.6:1 max VSWR. The package interface uses SMA on all of the ports.



Electrical Specifications			
Parameters	Units		Specifications
Pass Band Frequency	MHz		1000-18000
Nominal Coupling	dB		3.0
Nominal Degree	deg		90
Insertion Loss (Excluding Nominal Coupling Loss)	dB	Max	1.5
VSWR	/	Max	1.6:1
Isolation	/	Min	15
Amp. Unbalance	dB	Max	±1.2
Phase Unbalance	Deg	Max	±12
Power Handling	30 Watts(Average Power)		
Electrical Specification Notes	Values at +25°C.		

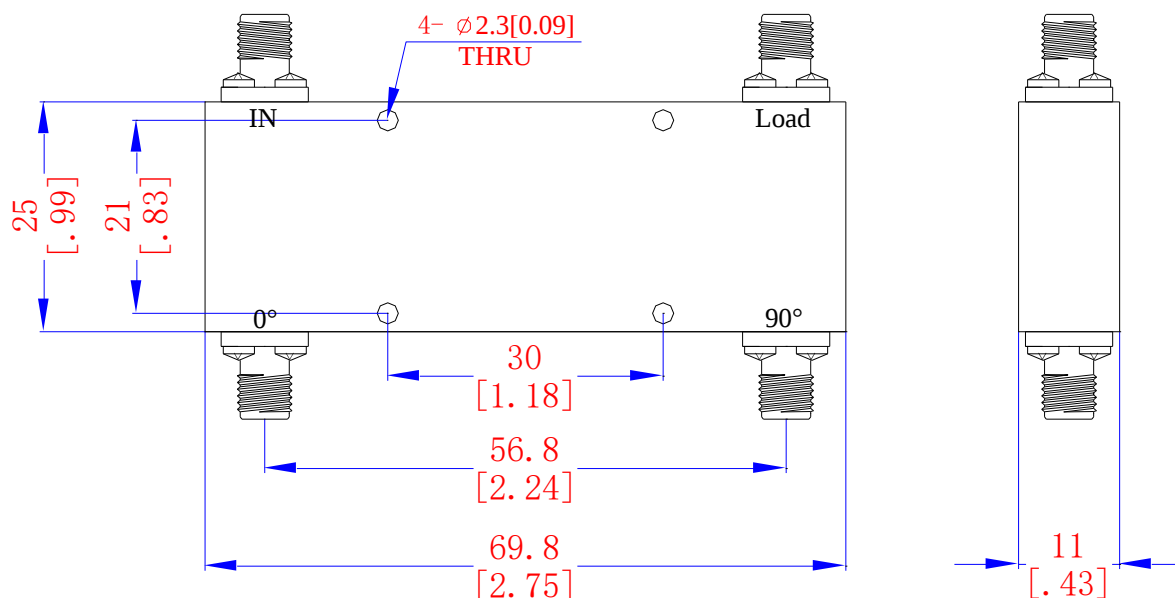
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Mechanical Specifications		Environmental Specification	
Parameter	Specification	Parameter	Specification
Input Connectors	SMA-Female (50Ω)	Operating Temp.	-40°C to +70°C
Output Connectors	SMA-Female (50Ω)	Storage Temp.	-55°C to +85°C
ROHS	Yes	Environment Class	TBD
Material	Aluminum (6061)	Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
Weight(Kg)	TBD		
Surface Finish	Black Painted	Humidity	95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions		
Note			

Outline Drawing:

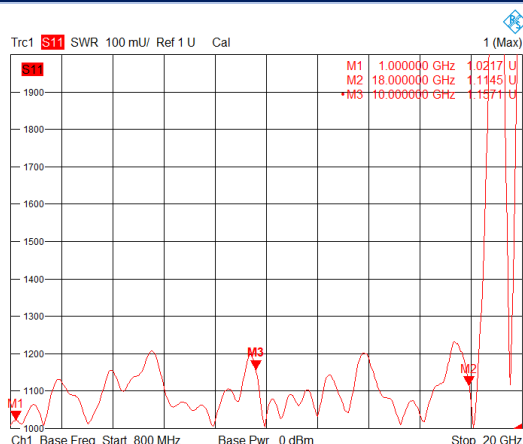
All Dimensions in mm (inches)

Outline Tolerances ± 0.3 (0.012)

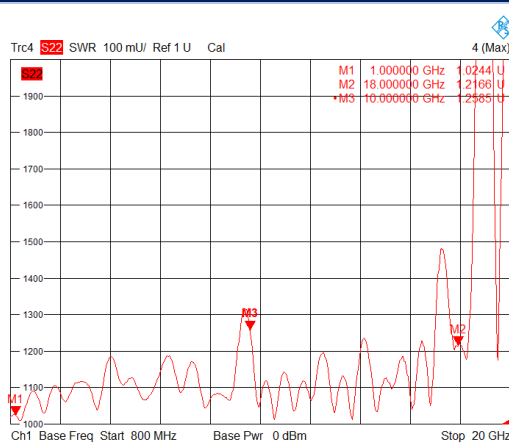


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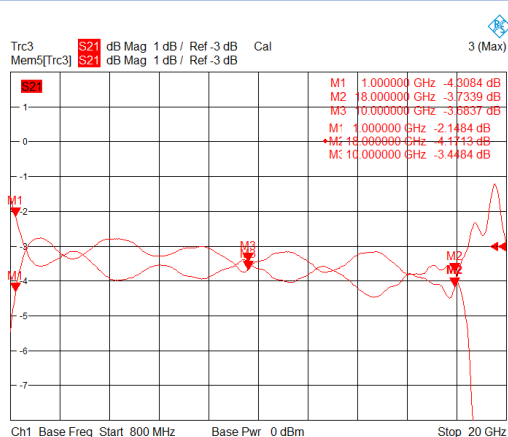
Input VSWR



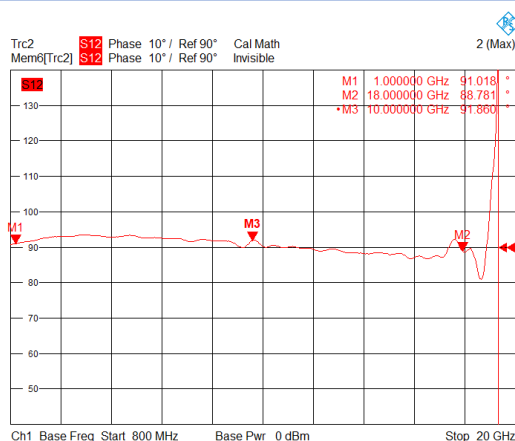
Output VSWR



Loss & Amplitude Unbalance



Phase Unbalance



Isolation

