Suzhou Talent Microwave,Inc
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Coax Directional Coupler

0.5-18GHz/30dB Coupling/SMA Female

Model: TC-05180-30S-50W

TC-05180-30S-50W is a coaxial directional coupler that delivers a 30 dB nominal coupling level and 10 dB minimum directivity across the full frequency range from 0.5 to 18 GHz. It is a three-port passive device that can couple a portion of the power from the main transmission line to the auxiliary line in a directional manner.

Features:

- Output Frequency: 0.5-18GHz
- Coupling: 30dB Typ
- Stackable mechanical design
- Low Insertion Loss
- Moderate Directivity
- 50 Ohm Matched Input / Output

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency Range	0.5		18	GHz
Insertion Loss (Excl Coupling)		1.0	1.8	dB
Coupling		30±1		dB
Directivity	10	12		dB
Power Handling			50	W
VSWR			1.7	:1
Impedance		50		Ohms

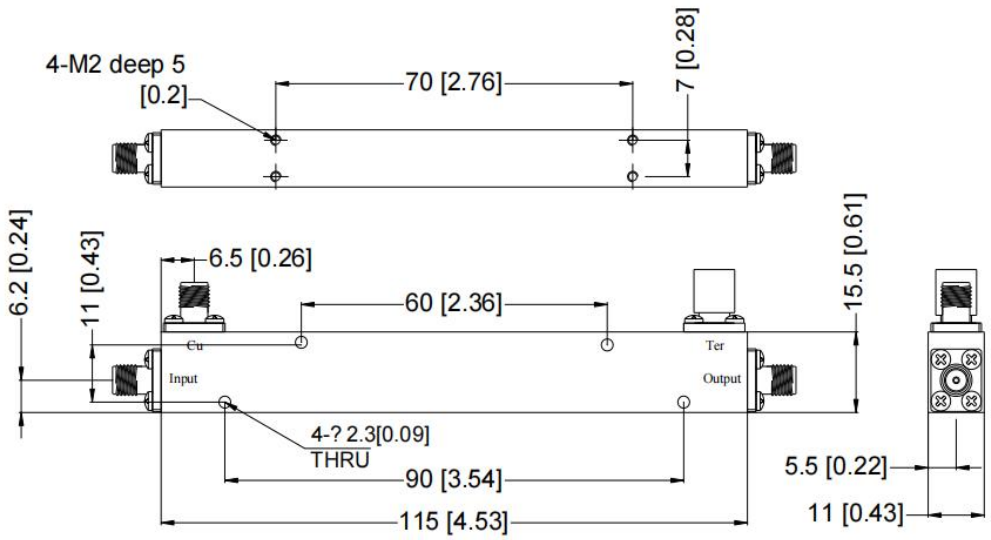
Mechanical Specifications:

Parameter	Value	Units
Input/Output Connector	SMA Female/SMA Female	
Size	115*15.5*11	mm

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Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Temperature Range	-45		+85	℃
Relative humidity	100% RH at 35c, 95%RH at 40℃			%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TC-05180-30S-50W	Coaxial Directional Coupler 0.5-18GHz, Coulping:30dB, SMA Female	Rev.1.0