

High Power Dual-Directional Coupler

0.001-0.5GHz/50dB Coupling/N,SMA

Model: TDC-000105-50N-1000

TDC-000105-50N-1000 is a high power dual-directional coupler that delivers a 20 dB nominal coupling level and 20 dB minimum directivity across the full frequency range from 0.001 to 0.5 GHz. It is a four-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: 0.001-0.5 GHz
- Max Power: 1000W(CW)
- Stackable mechanical design
- Low Insertion Loss
- Moderate Directivity
- 50 Ohm Matched Input / Output

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

Electrical Characteristics:

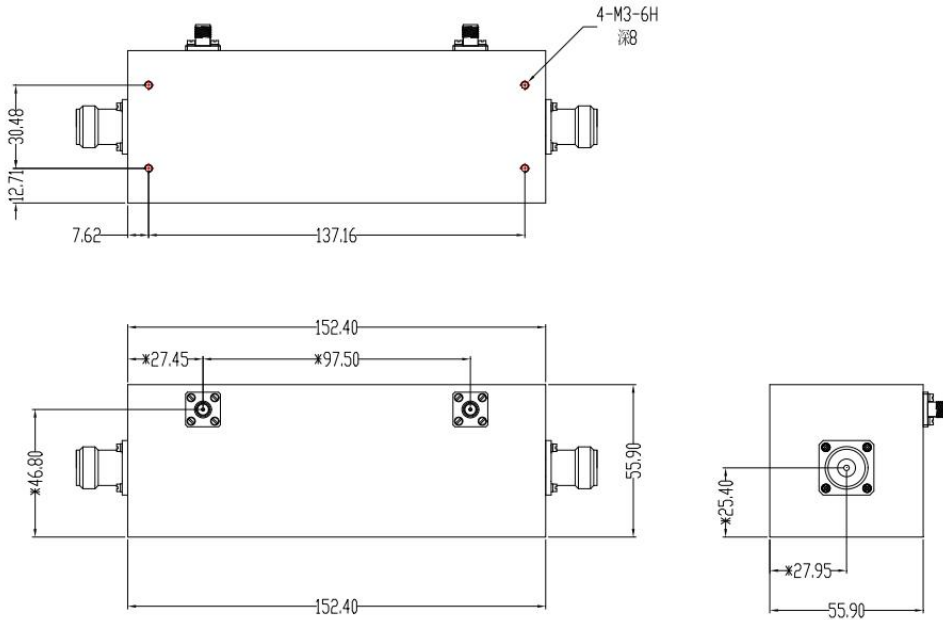
Parameter	Min	Typ	Max	Units
Frequency Range	0.001		0.5	GHz
Insertion Loss(Excl coupling)			0.2	dB
Coupling		50±1		dB
Directivity	20			dB
Main Line VSWR			1.3	:1
Power Handling			1000(CW)	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
RF Connector	SMA Female/N Female	
Finish	Ture color conductive oxide	
Size	152.4*55.9*55.9	mm

Outline Drawing:

Unit:mm; Tolerance:±0.2mm



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

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-55		+85°C	
Relative humidity	100% RH at 35c, 95%RH at 40°C			%
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
TDC-000105-50N-1000	High Power Dual-Directional Coupler 0.001-0.5 GHz, Coupling:50dB, SMA Female/N Female	Rev.1.0