泰莱微波 Talent Microwave

Suzhou Talent Microwave,Inc
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Coax Dual-Directional Coupler

9KHz-1GHz/40dB Coupling

Model: TDC-9K1G-40N-300

TDC-9K1G-40N-300 is a coax dual-directional coupler that delivers a 40dB nominal coupling level and 13dB minimum directivity across the full frequency range from 9KHz to 1GHz.. 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: 9KHz-1GHz
- Max Power: 300W
- Stackable mechanical design
- Low Insertion Loss
- Moderate Directivity
- 50 Ohm Matched Input / Output

Applications:

- Test Labs
- Instrumentations
- Sub-assemblies

电气特性 Electrical Characteristics:

参数 Parameter		Min	Typ	Max	单位 Units
工作频率 Frequency Range		9KHz		1GHz	
主线驻波 Main Line VSWR				1.25	:1
插入损耗 Insertion Loss				0.6	dB
耦合度 Coupling			40±1.5		dB
方向性 Directivity	@9-100KHz	13			dB
	@100KHz-1GHz	18			
耐功率 Power Handling			300		W
阻抗 Impedance			50		Ohms

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
材质 Material	Aluminum	
连接器材质 Connector Material	Nickel plated brass	
RF接口 RF Connector	N Female	
耦合接口 Coupling Port	SMA Female	

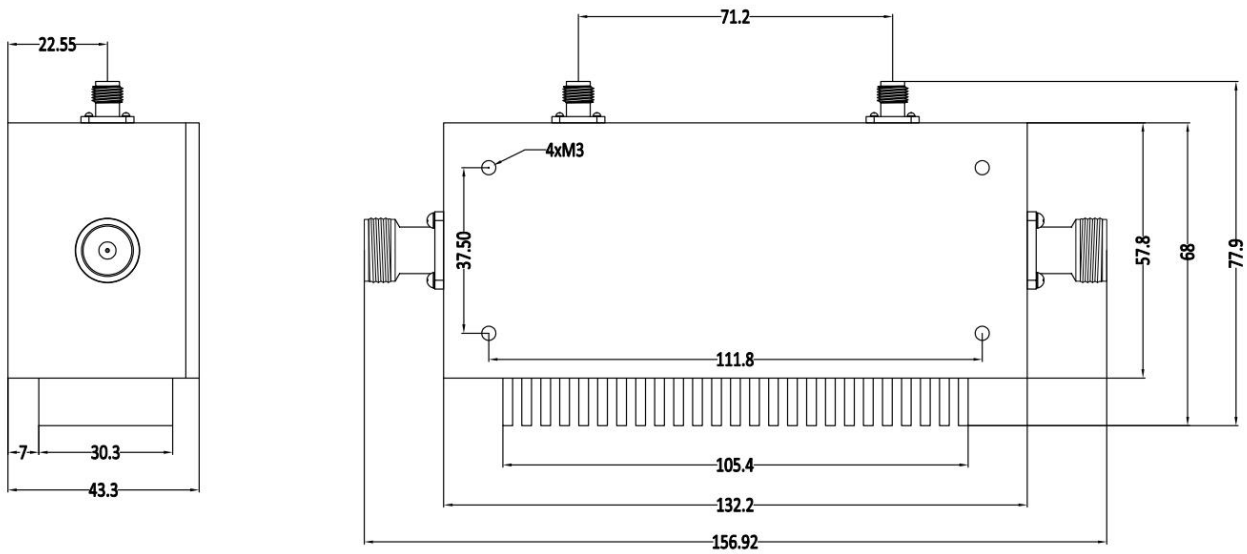
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机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
尺寸 Size	156.92*77.9*43.3	mm
重量 Weight	≤650	g

外形图 Outline Drawing:

Unit:mm; Tolerance:±2%



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

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+85	℃
存储温度 Non-operating Temperature	-50		+100	℃
相对湿度 Relative humidity	100% RH at 35c, 95%RH at 40℃			%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

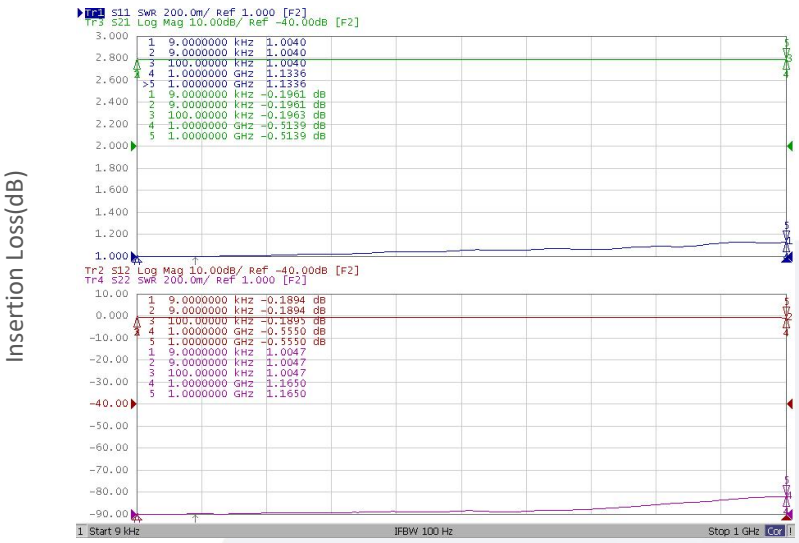
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订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TDC-9K1G-40N-300	Coax Dual-Directional Coupler 9KHz-1GHz, Coulping: 40dB	Rev.1.0

典型曲线 Typical Performance Data:

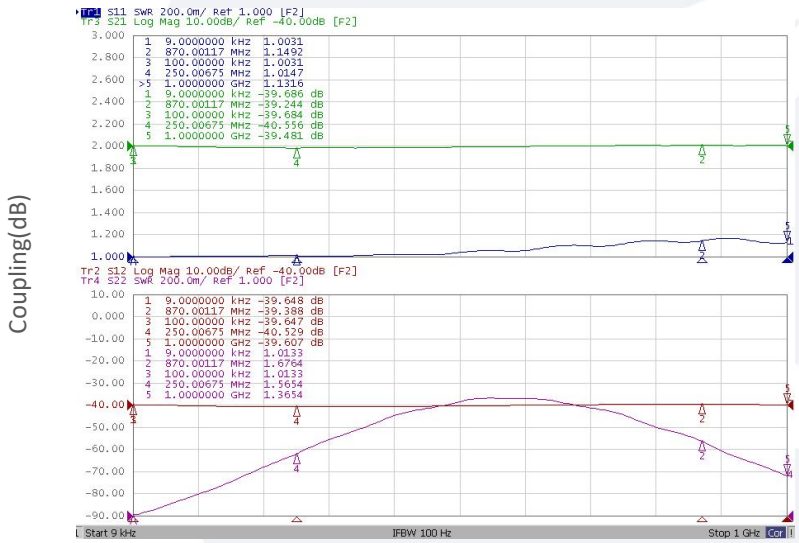
Insertion Loss vs Frequency



Insertion Loss(dB)

Frequency(GHz)

A Port Coupling vs Frequency



Coupling(dB)

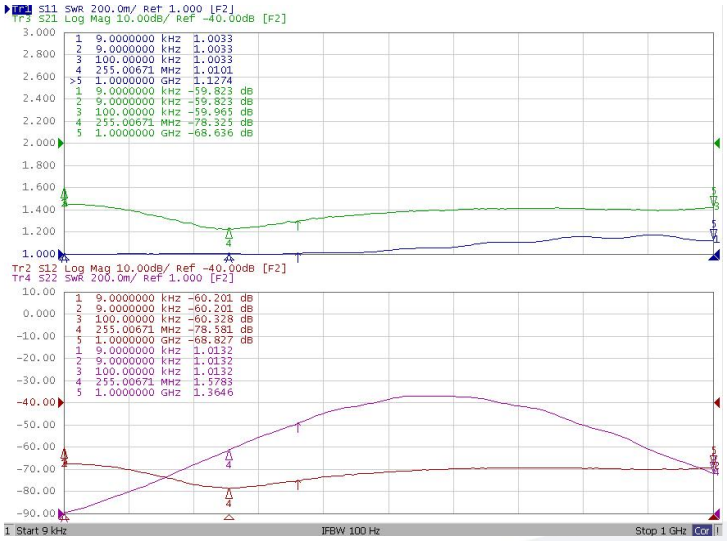
Frequency(GHz)

Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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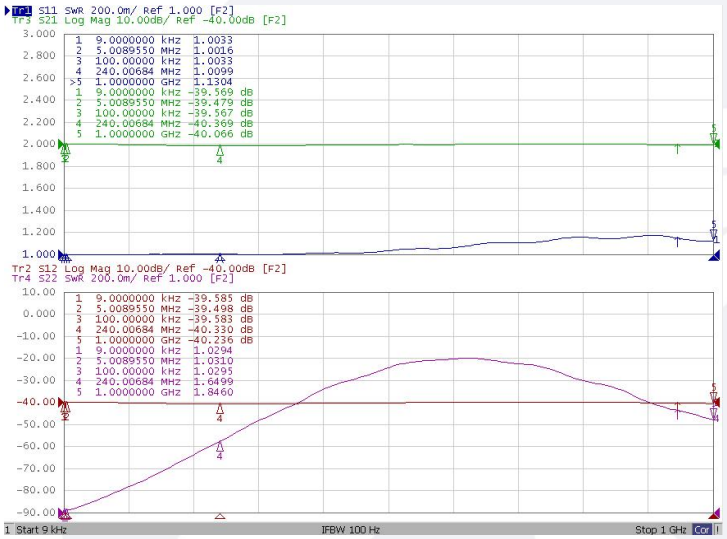
A Port Isolation vs Frequency



Isolation(dB)

Frequency(GHz)

B Port Coupling vs Frequency



Coupling(dB)

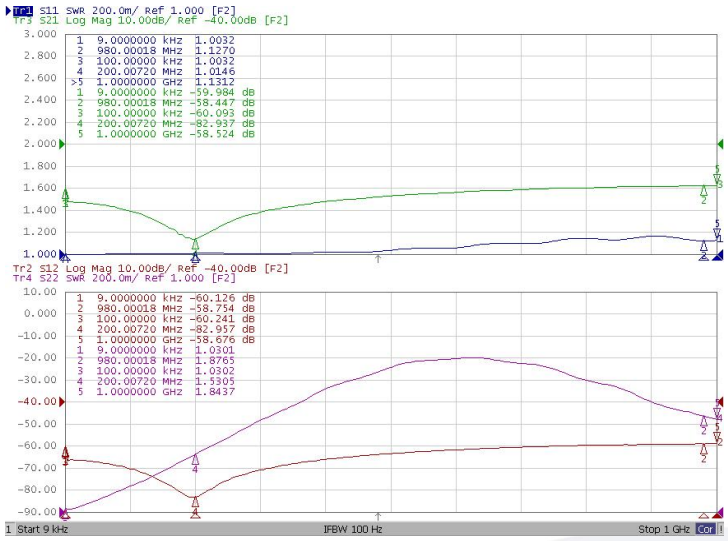
Frequency(GHz)

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典型曲线 Typical Performance Data:

B Port Isolation vs Frequency



Isolation(dB)

Frequency(GHz)

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