

Coax Dual-Directional Bridge Coupler

9KHz-26.5GHz/16dB Coupling/2.92mm

Model: TDG-9K26G-16-S

TDG-9K26G-16-S is a coax dual-directional bridge coupler that delivers a 16 dB nominal coupling level and 20 dB minimum directivity across the full frequency range from 9KHz to 26.5GHz.. 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-26.5GHz
- Max Power: 1W
- 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:

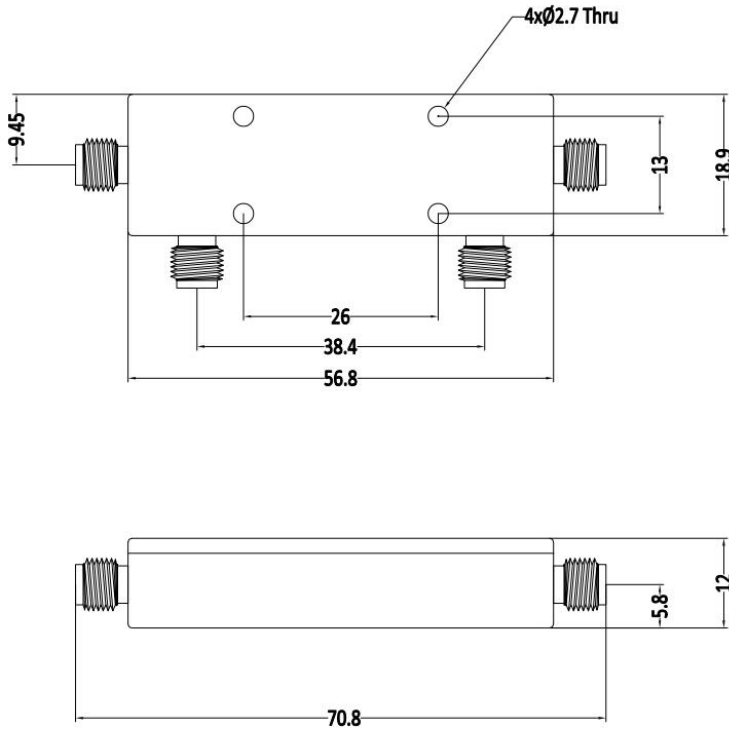
参数 Parameter	Min	Typ	Max	单位 Units
工作频率 Frequency Range	9KHz		26.5GHz	
回波损耗 Return Loss			-16	dB
插入损耗 Insertion Loss		4.5	5.5	dB
耦合度 Coupling@150KHz~26.5GHz		16±1.5		dB
耦合度平坦度 Coupling Sensitivity@150KHz~26.5GHz		±1.25		dB
方向性 Directivity@150KHz~26.5GHz	20			dB
耐功率 Power Handling		1		W
阻抗 Impedance		50		Ohms

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
RF接口 RF Connector	2.92mm Female	
尺寸 Size	56.8*18.9*12	mm

外形图 Outline Drawing:

Unit:mm



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

温度环境 Environmental Conditions:

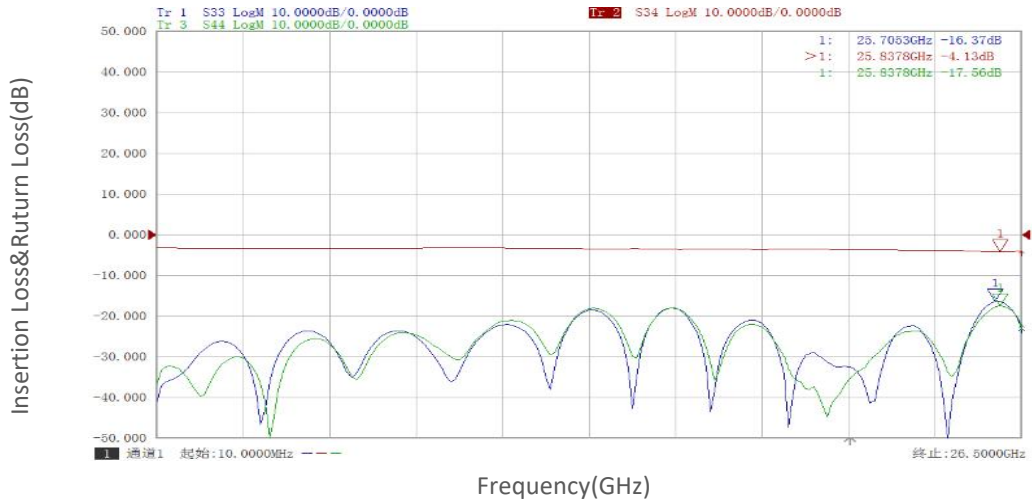
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity	100% RH at 35c, 95%RH at 40°C			%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

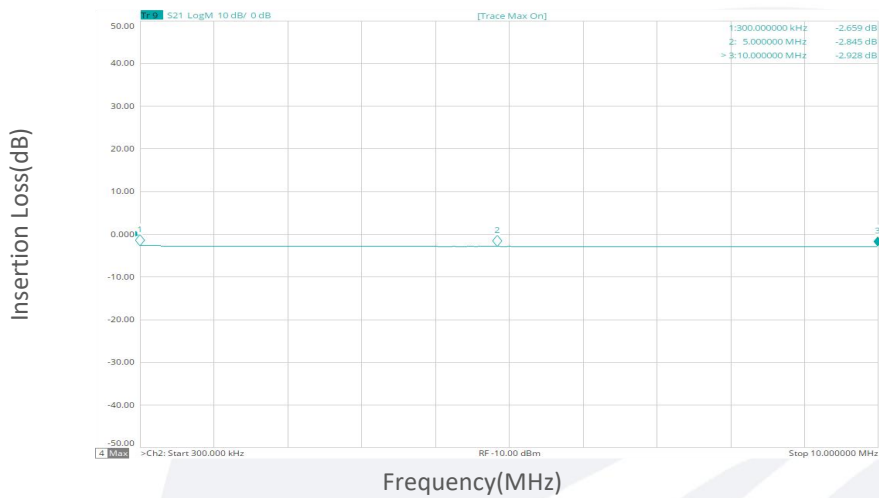
标准型号 Base Number	描述 Description	版本号 Revision
TDG-9K26G-16-S	Coax Dual-Directional Bridge Coupler 9KHz-26.5GHz, Coupling:16dB, 2.92mm Female	Rev.1.0

典型曲线 Typical Performance Data:

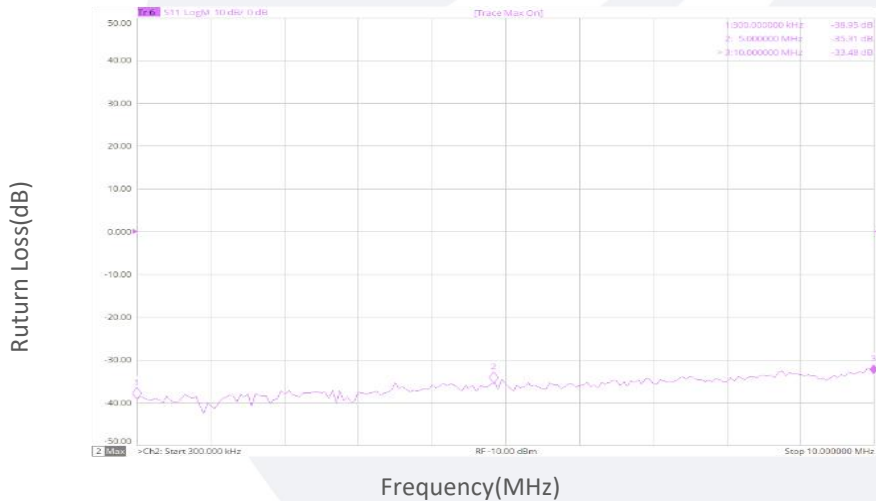
Insertion Loss&Return Loss vs Frequency



Insertion Loss vs Frequency



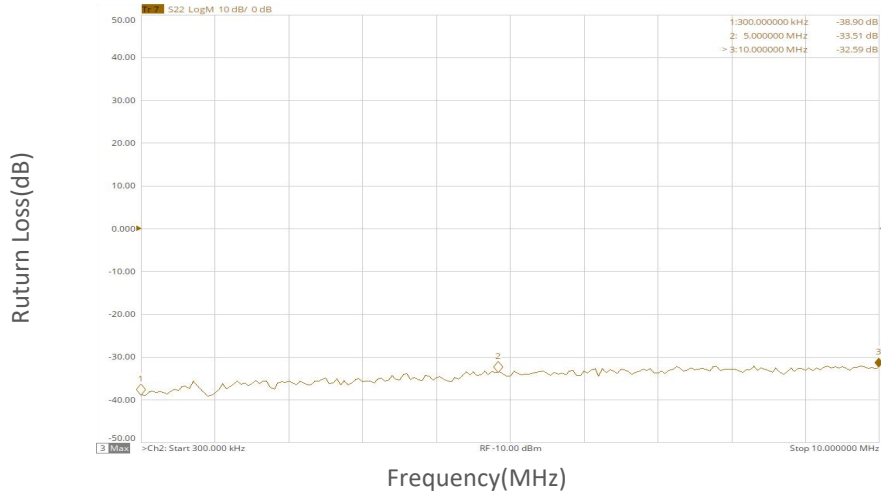
Main Line Return Loss vs Frequency



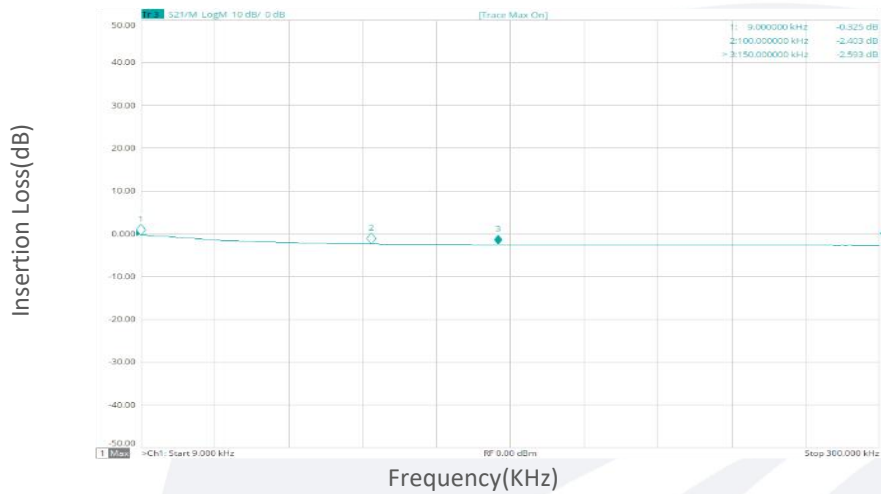
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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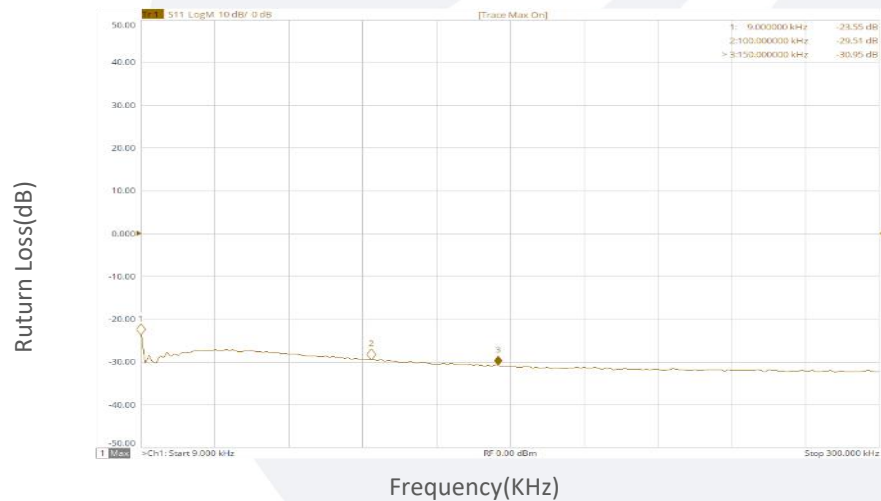
Coupling Port Return Loss vs Frequency



Insertion Loss vs Frequency



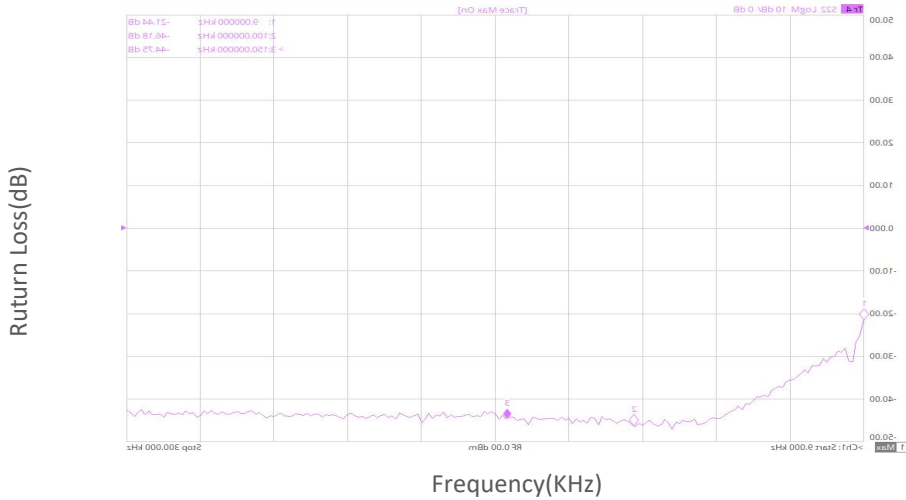
Main Line Return Loss vs Frequency



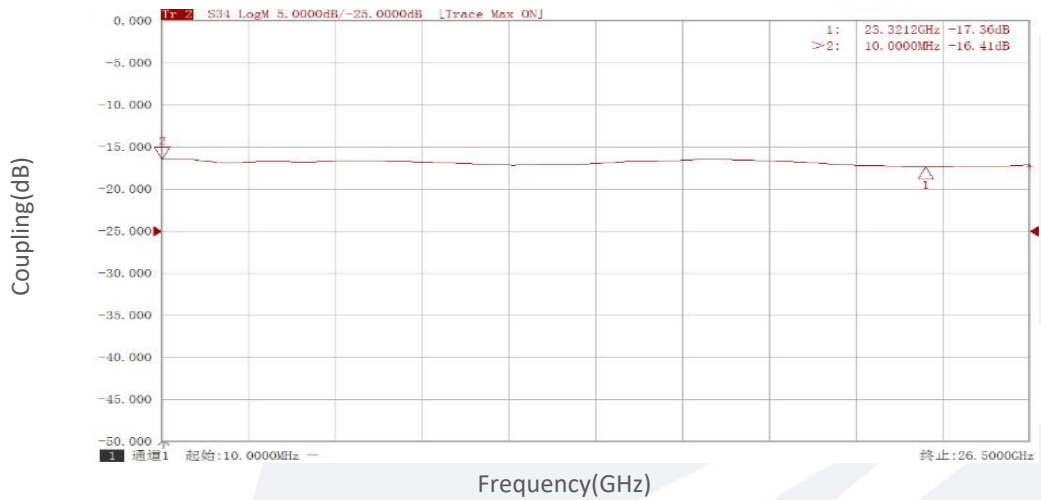
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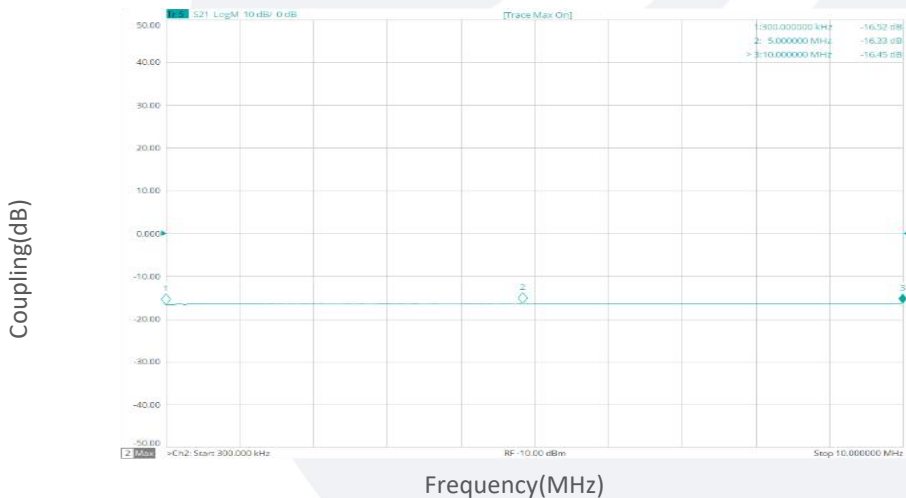
Coupling Port Return Loss vs Frequency



Coupling vs Frequency



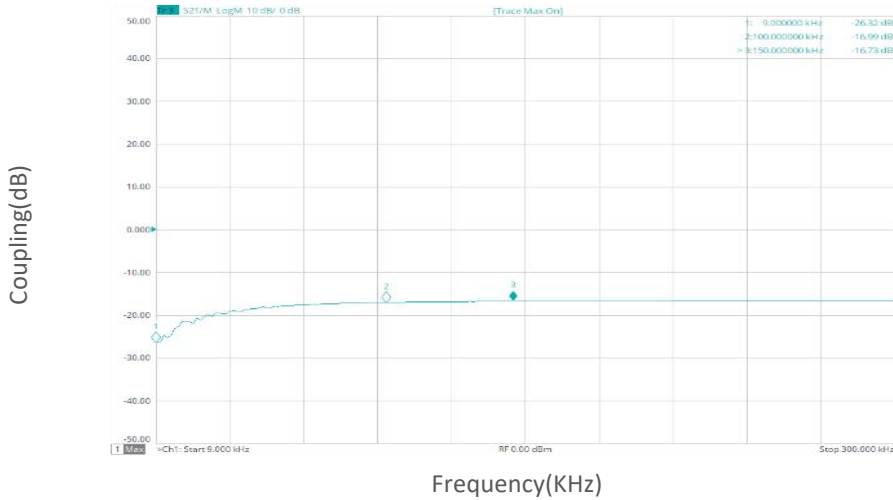
Coupling vs Frequency



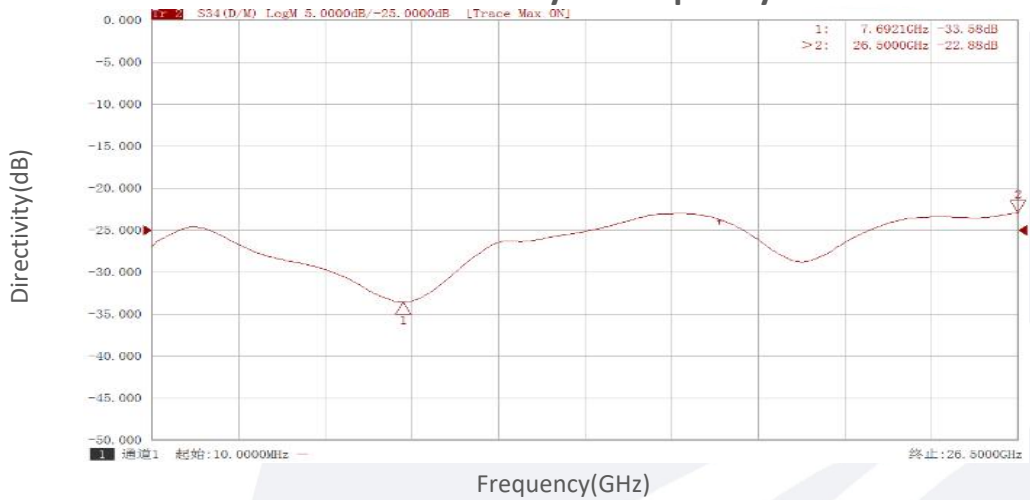
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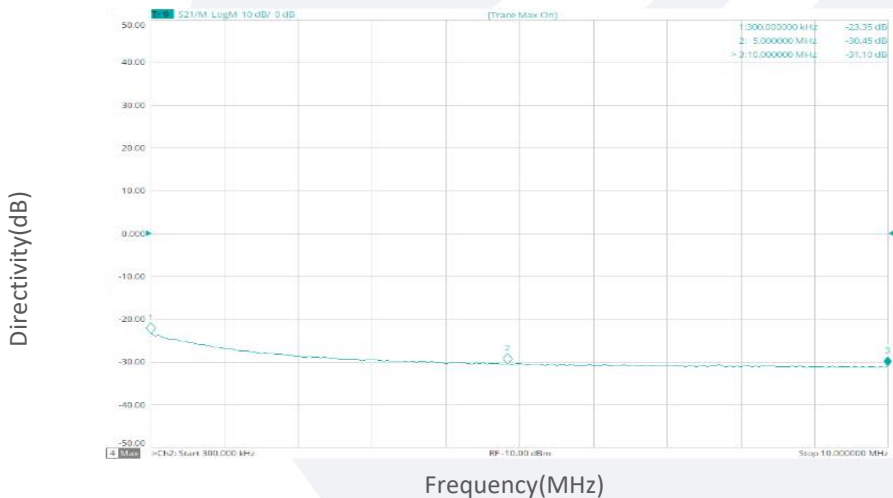
Coupling vs Frequency



Directivity vs Frequency

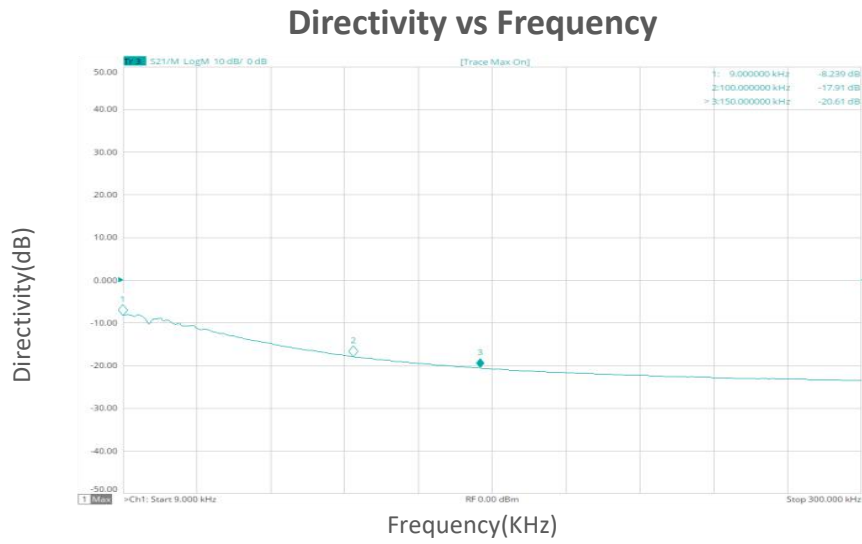


Directivity vs Frequency



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