

Part No.: TBG-1030-3S-90-SMD

90 Degree 3dB Bridge

电气特性 Electrical:

工作频率 Frequency Range: 1000-3000MHz

耦合度Coupling : 3dB

插入损耗 Insertion Loss: 0.25dB Max

隔离度Isolation: -20.0dB Min

驻波 VSWR: 1.18:1 Max

幅度平衡 Amplitude Balance: ± 1.0 dB max

相位平衡Phase Balance: 90 ± 2.5 degree

耐功率 Power Handling: 400 Watt

阻抗 Impedance: 50 OHMS

机械特性 Mechanical:

温度范围Temperature Range: -55° C - $+105^{\circ}$ C

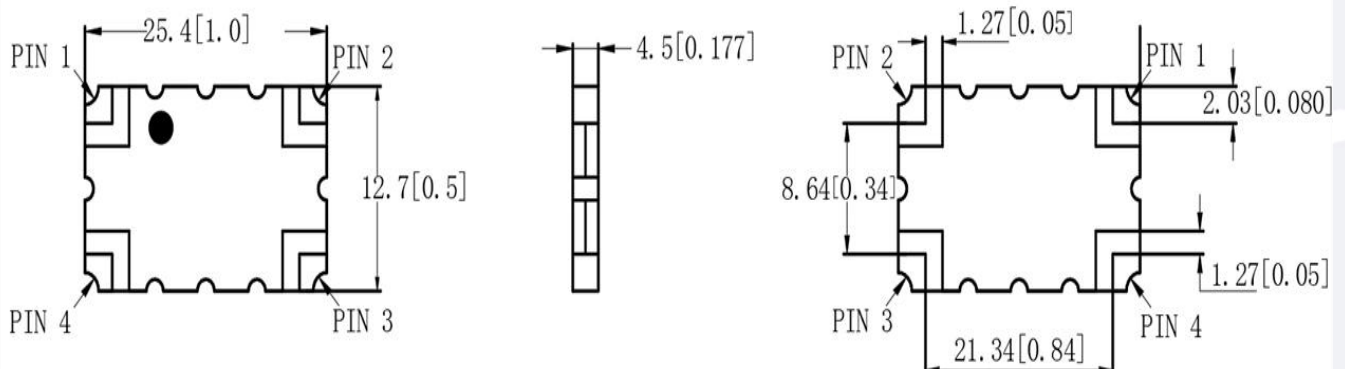
大小Size: 25.4mm*12.7mm

厚度Thickness: 4.5mm

相对湿度Relative Humidity: 0 ~ 90%

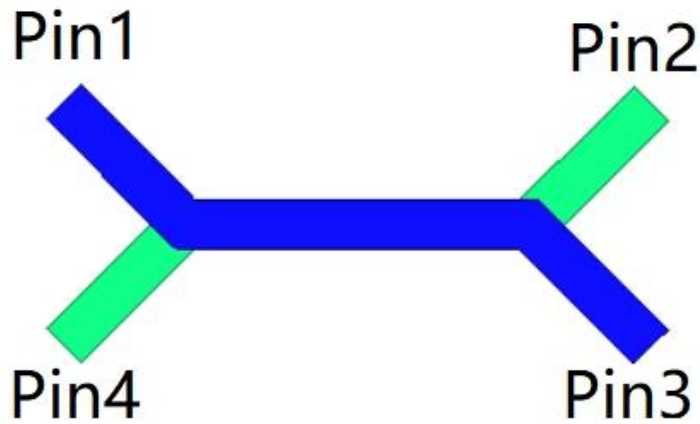
外形尺寸Outline Drawing:

Unit: mm(Inches)



端口配置表 Port Configuration Table:

Hybrid Coupler Pin Configuration



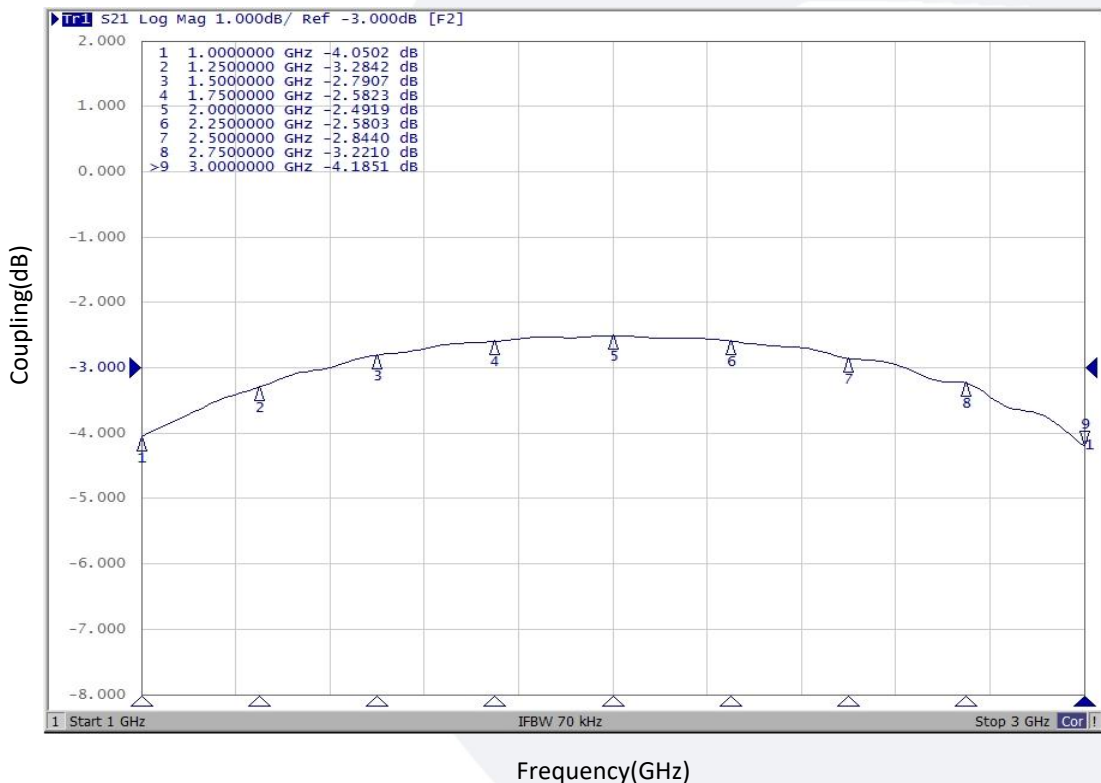
Configuration	Pin1	Pin2	Pin3	Pin4
Splitter	Input	Isolated	$-3\text{dB} < \theta - 90^\circ$	$-3\text{dB} < \theta$
Splitter	Isolated	Input	$-3\text{dB} < \theta$	$-3\text{dB} < \theta - 90^\circ$
Splitter	$-3\text{dB} < \theta - 90^\circ$	$-3\text{dB} < \theta$	Input	Isolated
Splitter	$-3\text{dB} < \theta$	$-3\text{dB} < \theta - 90^\circ$	Isolated	Input
Combiner	$A < \theta - 90^\circ$	$A < \theta$	Isolated	Output
Combiner	$A < \theta$	$A < \theta - 90^\circ$	Output	Isolated
Combiner	Isolated	Output	$A < \theta - 90^\circ$	$A < \theta$
Combiner	Output	Isolated	$A < \theta$	$A < \theta - 90^\circ$

Typical Performance Data

Frequency	MHz	1000	1250	1500	1750	2000	2250	2500	2750	3000
Coupling	dB	-4.05	-3.28	-2.79	-2.58	-2.49	-2.58	-2.84	-3.22	-4.19
Transmission	dB	-2.21	-2.85	-3.24	-3.55	-3.60	-3.56	-3.31	-2.80	-2.26
Insertion Loss	dB	-0.12	-0.06	0.02	-0.06	-0.04	-0.06	-0.07	-0.01	-0.22
Isolation	dB	-25.72	-25.88	-26.40	-27.35	-28.41	-29.16	-28.43	-25.96	-23.35
Phase	degree	90.42	90.68	90.74	91.19	91.29	91.79	91.93	91.85	92.14
Return Loss	Input	dB	1.14	1.14	1.13	1.11	1.09	1.07	1.05	1.06
	Coupler	dB	1.14	1.12	1.09	1.05	1.03	1.04	1.07	1.10
	Transmission	dB	1.12	1.11	1.10	1.09	1.08	1.07	1.08	1.10
	Isolated	dB	1.11	1.07	1.05	1.06	1.09	1.12	1.15	1.17

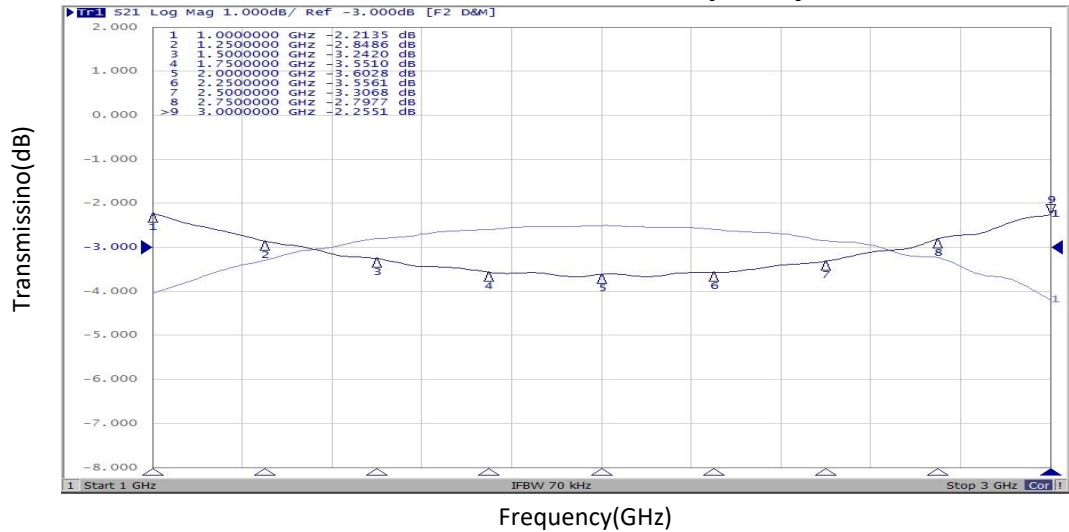
典型曲线 Typical Performance Data:

Coupling vs Frequency

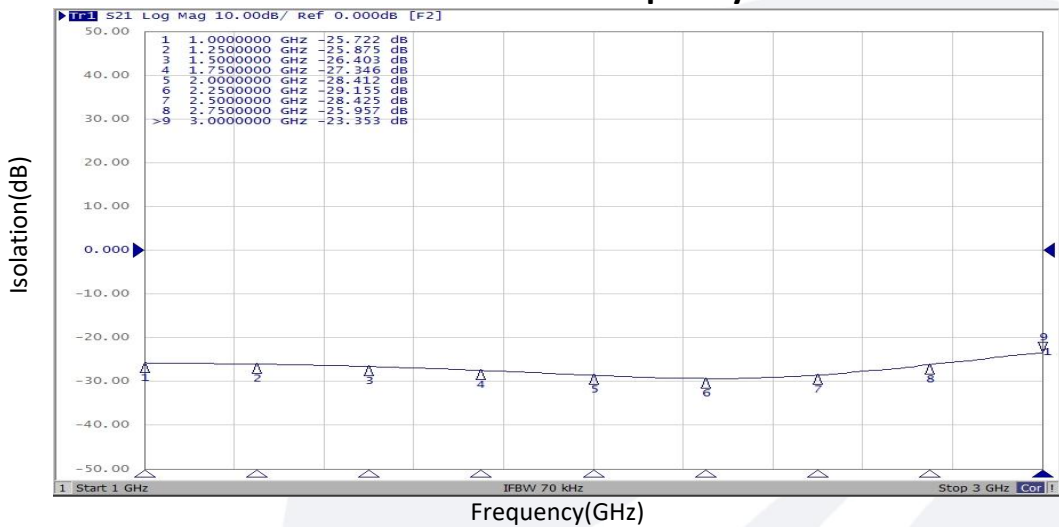


典型曲线 Typical Performance Data:

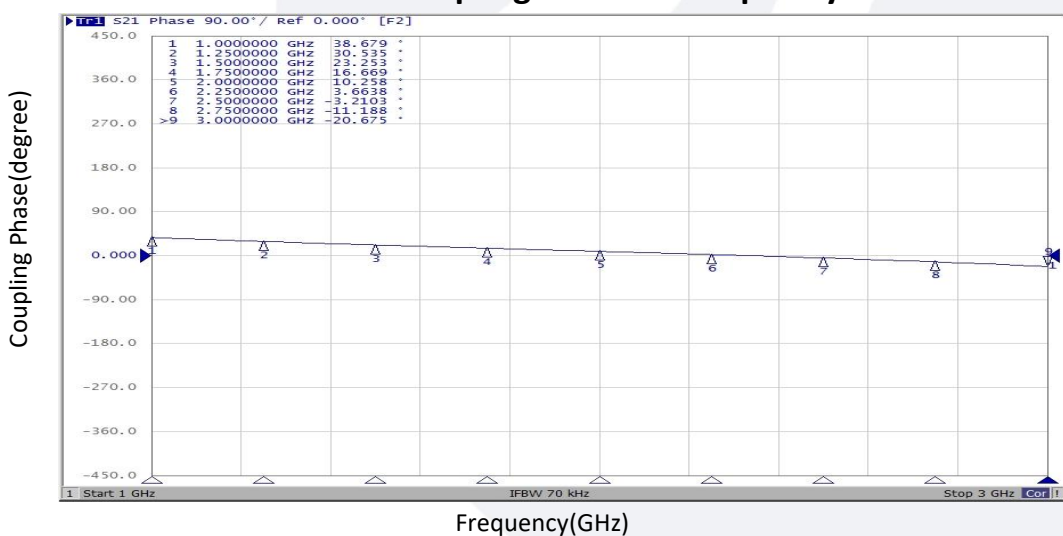
Transmission vs Frequency



Isolation vs Frequency

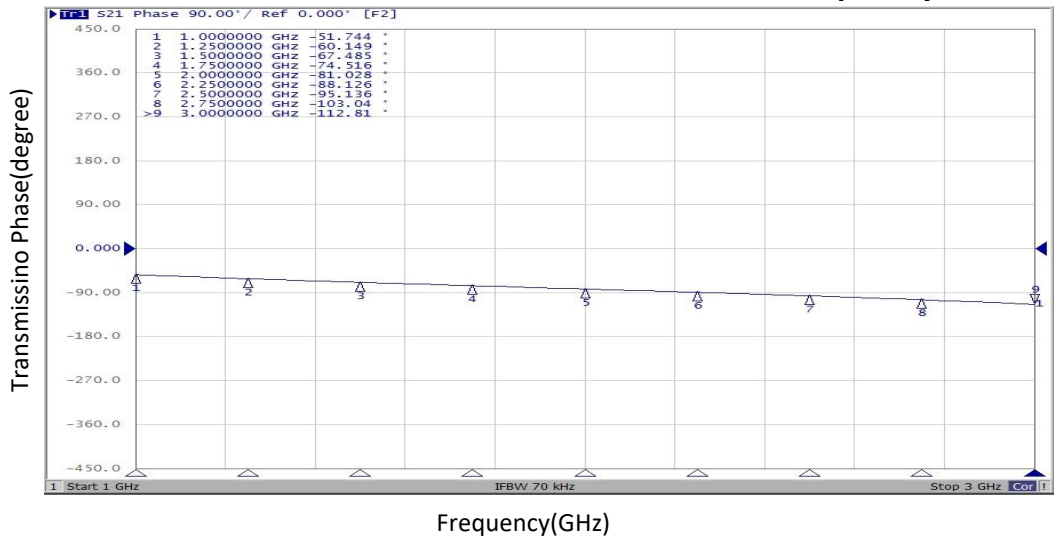


Coupling Phase vs Frequency



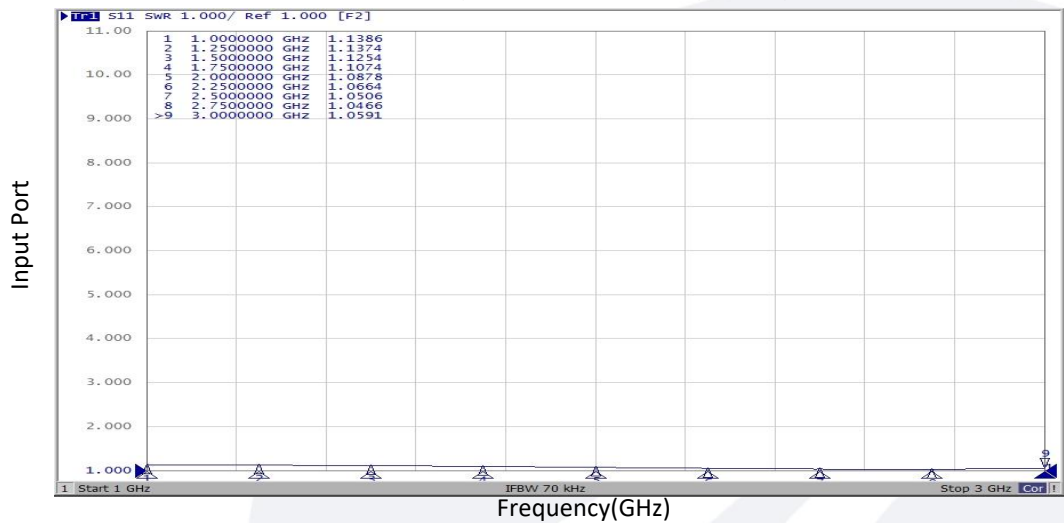
典型曲线 Typical Performance Data:

Transmission Phase vs Frequency



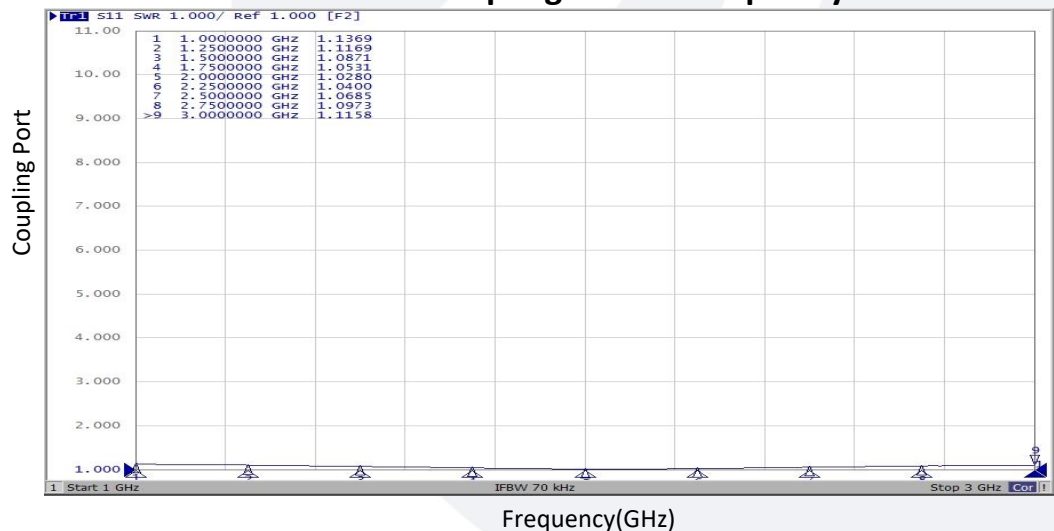
Frequency(GHz)

Input Port vs Frequency



Frequency(GHz)

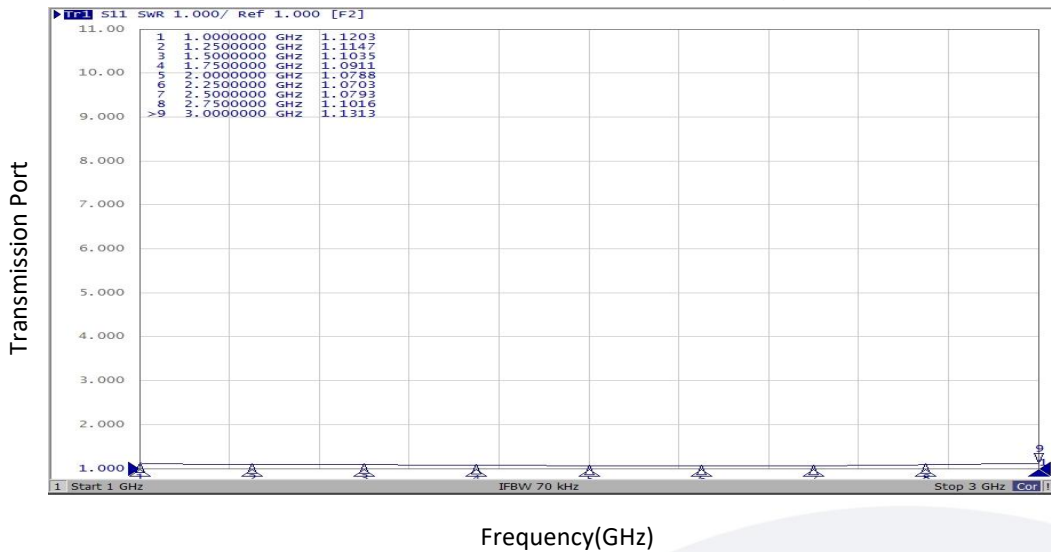
Coupling Port vs Frequency



Frequency(GHz)

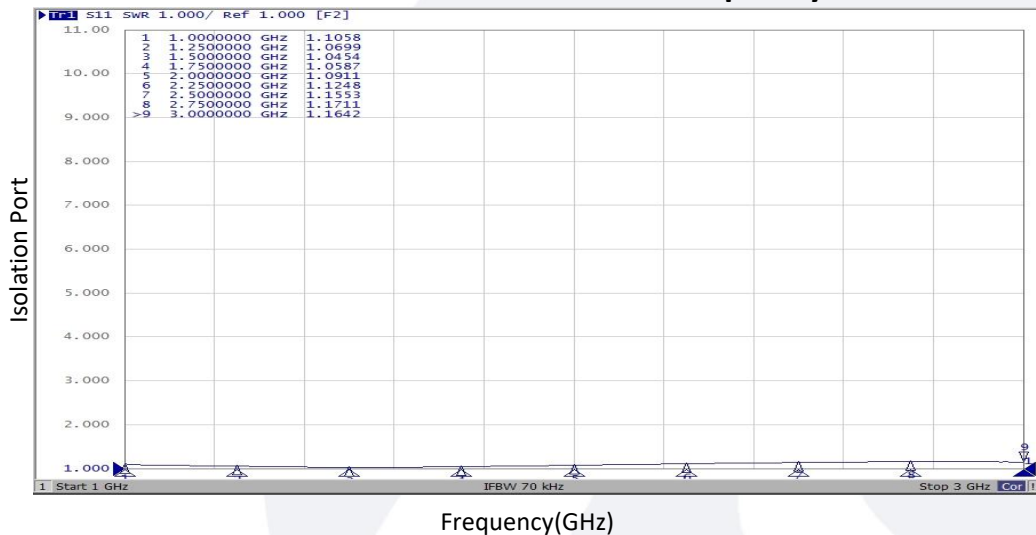
典型曲线 Typical Performance Data:

Transmission Port vs Frequency



Frequency(GHz)

Isolation Port vs Frequency



Frequency(GHz)