

Part No.: TBG-0810-3S-90-SMD

90 Degree 3dB Bridge

电气特性 Electrical:

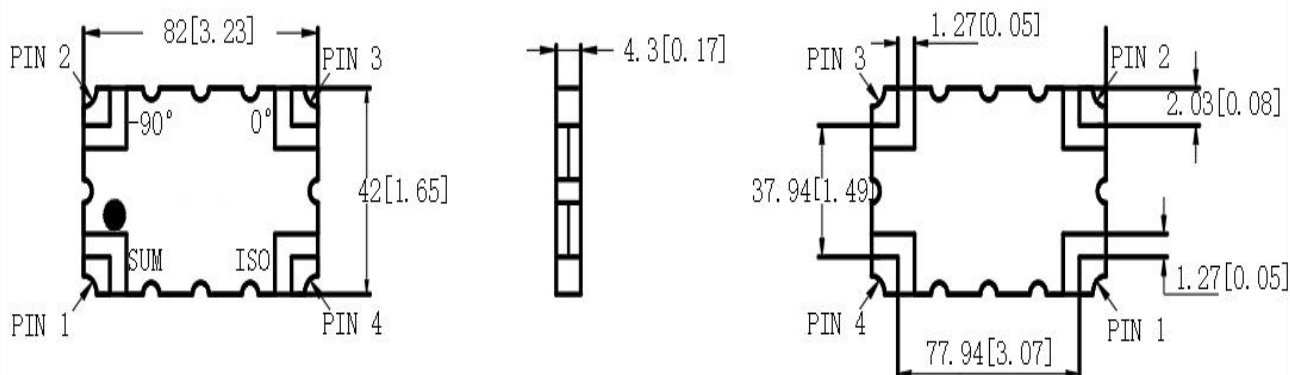
工作频率 Frequency Range:	80-1000MHz
耦合度 Coupling :	3dB
插入损耗 Insertion Loss:	1.0dB Max
隔离度 Isolation:	20dB Min
驻波 VSWR:	1.38:1 Max
幅度平衡 Amplitude Balance:	$\pm 1.0\text{dB max}$
相位平衡 Phase Balance:	$90 \pm 2.5 \text{ degree}$
耐功率 Power Handling:	300 Watt
阻抗 Impedance:	50 OHMS

机械特性 Mechanical:

温度范围 Temperature Range:	$-55^{\circ} \text{ C} - +105^{\circ} \text{ C}$
大小 Size:	82mm*42mm
厚度 Thickness:	4.3mm
相对湿度 Relative Humidity:	0 ~ 90%

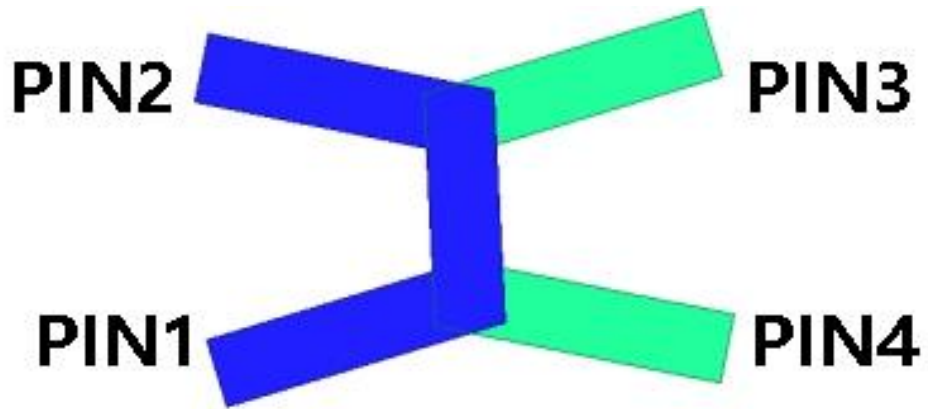
外形尺寸 Outline Drawing:

Unit: mm(Inches)



端口配置表 Port Configuration Table:

Hybrid Coupler Pin Configuration



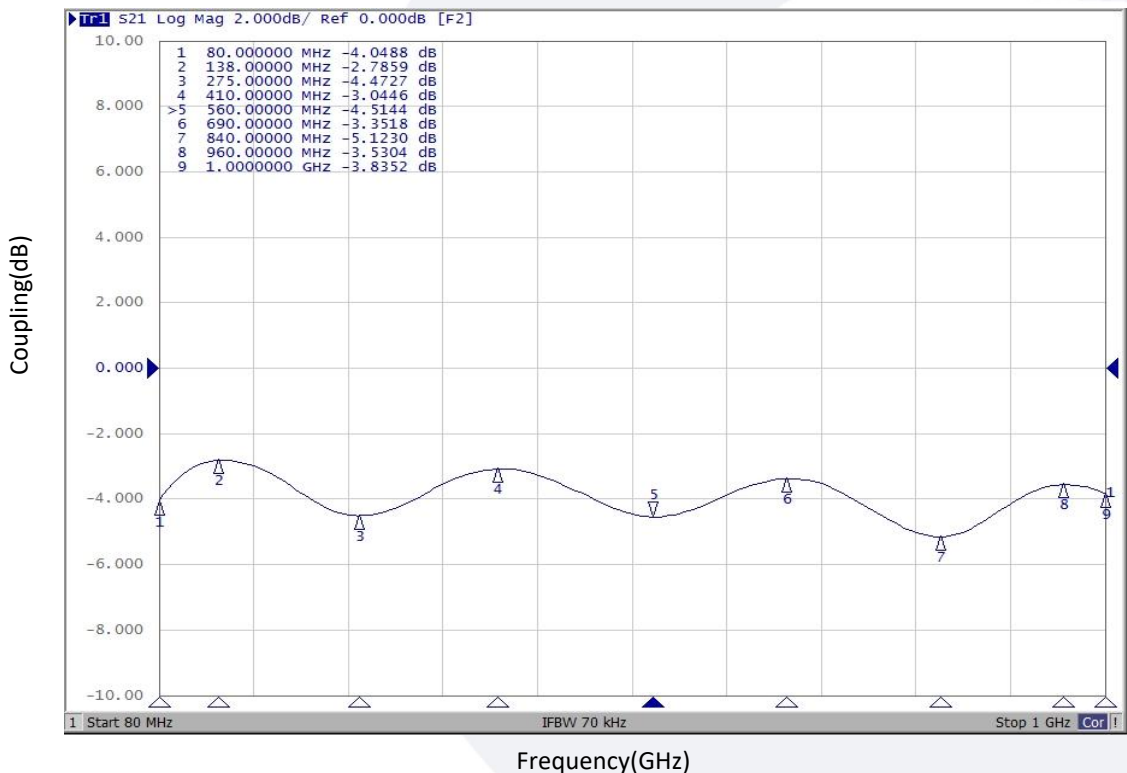
Configuration	Pin1	Pin2	Pin3	Pin4
Splitter	Input	$-3\text{dB} < \theta < 90^\circ$	$-3\text{dB} < \theta$	Isolated
Splitter	$-3\text{dB} < \theta < 90^\circ$	Input	Isolated	$-3\text{dB} < \theta$
Splitter	$-3\text{dB} < \theta$	Isolated	Input	$-3\text{dB} < \theta < 90^\circ$
Splitter	Isolated	$-3\text{dB}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

Typical Performance Data

Frequency	MHz	80	138	275	410	560	690	840	960	1000	
Coupling	dB	-4.05	-2.79	-4.47	-3.04	-4.51	-3.35	-5.12	-3.53	-3.84	
Transmission	dB	-2.46	-3.81	-2.60	-4.04	-2.99	-4.20	-3.12	-4.51	-4.09	
Insertion Loss	dB	-0.24	-0.28	-0.51	-0.51	-0.71	-0.73	-0.99	-0.98	-0.95	
Isolation	dB	-49.00	-35.73	-26.11	-37.33	-30.31	-26.33	-23.56	-21.35	-20.97	
Phase	degree	90.07	90.51	90.06	90.38	90.66	90.51	90.58	90.71	92.33	
Return Loss	Input(P1)	dB	1.02	1.03	1.12	1.05	1.25	1.11	1.35	1.15	1.17
	Coupler(P3)	dB	1.04	1.05	1.11	1.05	1.04	1.16	1.09	1.27	1.33
	Transmission (P2)	dB	1.05	1.05	1.12	1.04	1.03	1.15	1.09	1.27	1.25
	Isolated(P4)	dB	1.03	1.04	1.09	1.02	1.21	1.12	1.28	1.21	1.21

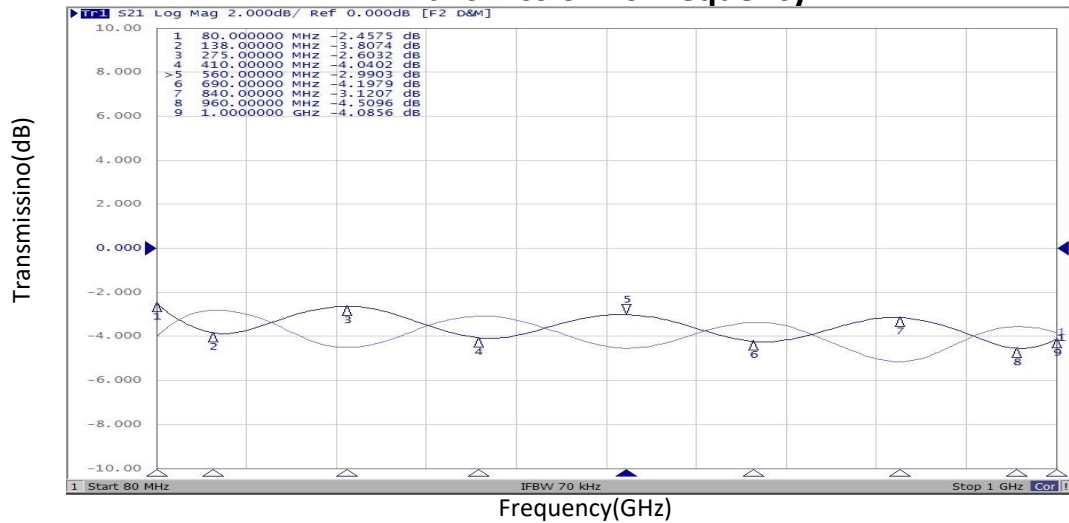
典型曲线 Typical Performance Data:

Coupling vs Frequency

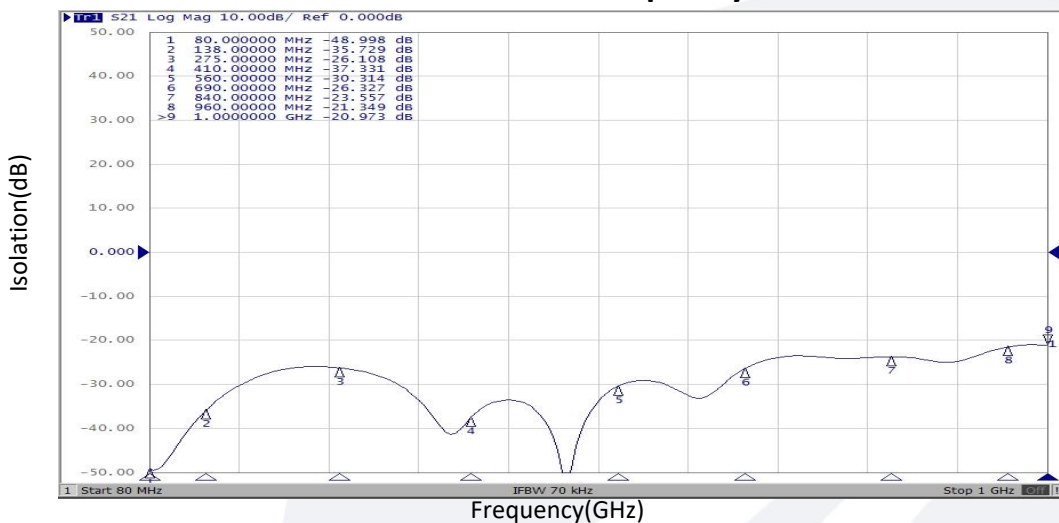


典型曲线 Typical Performance Data:

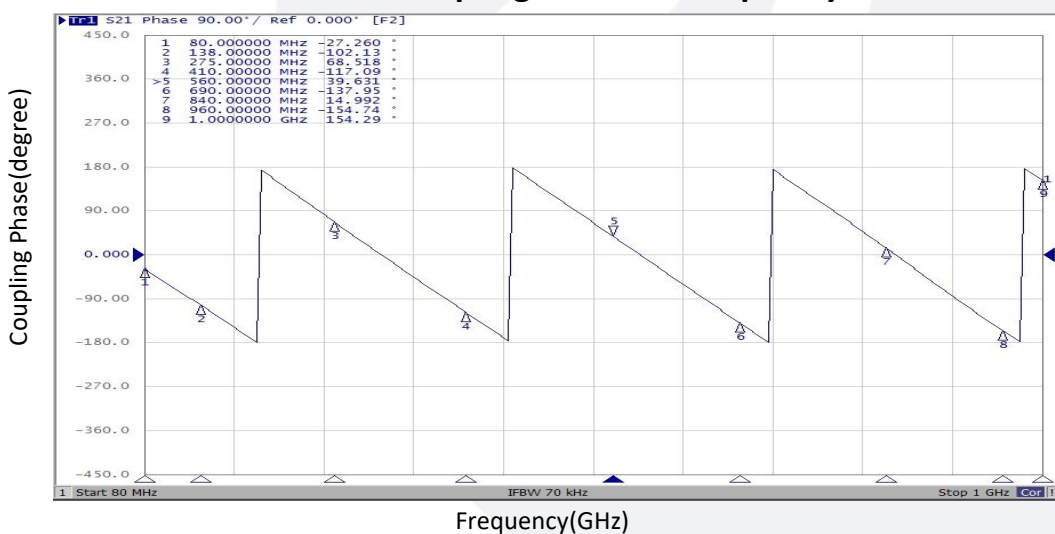
Transmission vs Frequency



Isolation vs Frequency

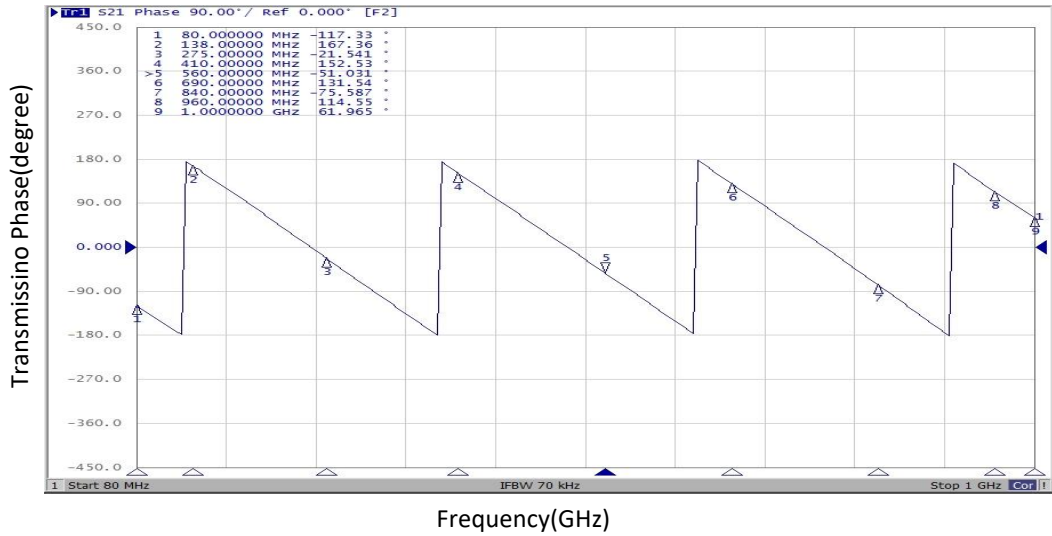


Coupling Phase vs Frequency



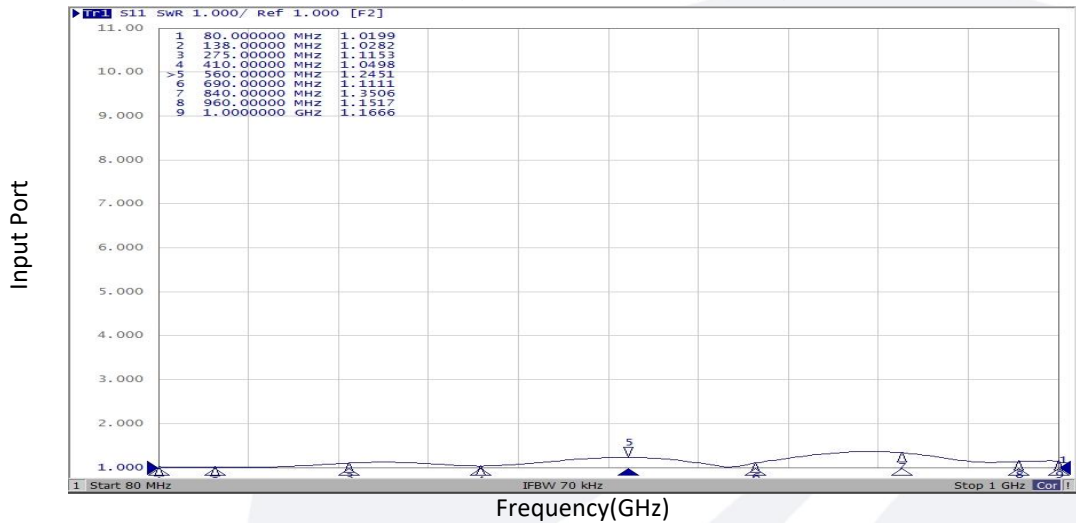
典型曲线 Typical Performance Data:

Transmission Phase vs Frequency



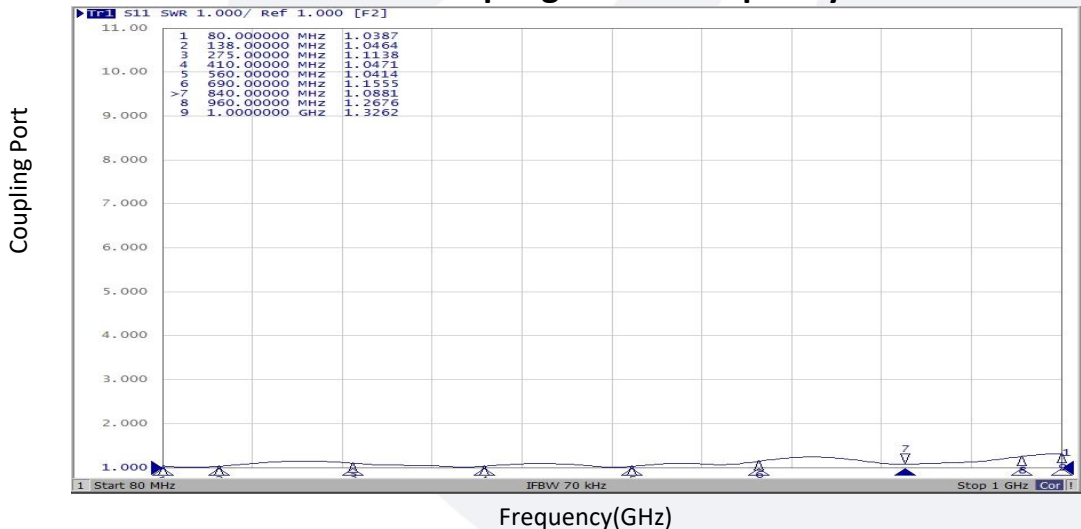
Frequency(GHz)

Input Port vs Frequency



Frequency(GHz)

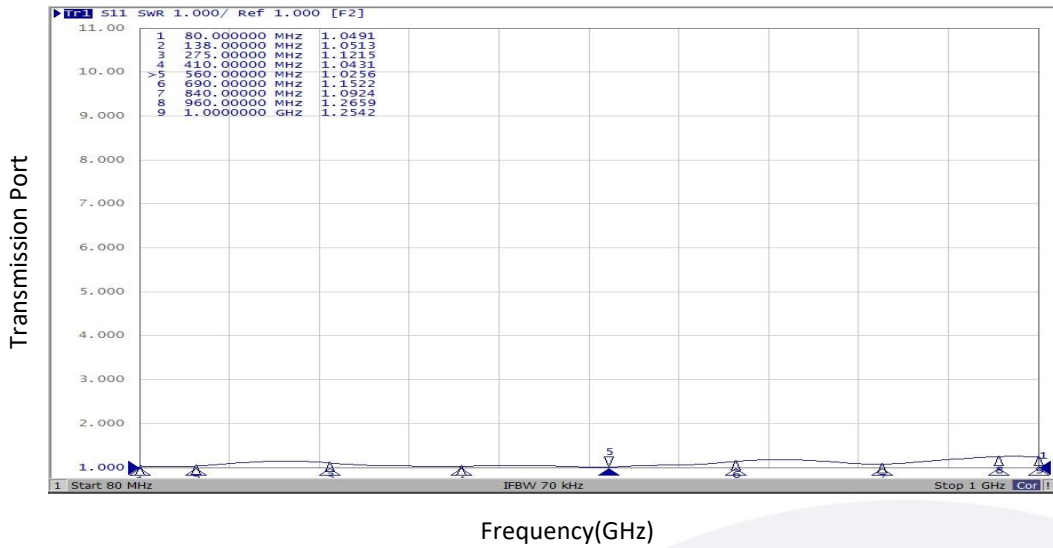
Coupling Port vs Frequency



Frequency(GHz)

典型曲线 Typical Performance Data:

Transmission Port vs Frequency



Isolation Port vs Frequency

