

Part No.: TBG-003512-3S-90-SMD

90 Degree 3dB Bridge

电气特性 Electrical:

工作频率 Frequency Range:	30-512MHz
耦合度Coupling :	3dB
插入损耗 Insertion Loss:	1.25dB Max
隔离度Isolation:	18.0dB Min
驻波 VSWR:	1.7:1 Max
幅度平衡 Amplitude Balance:	$\pm 1.25(30M)$ dB max
相位平衡 Phase Balance:	90 ± 3.0 degree
耐功率 Power Handling:	600 Watt
阻抗 Impedance:	50 OHMS

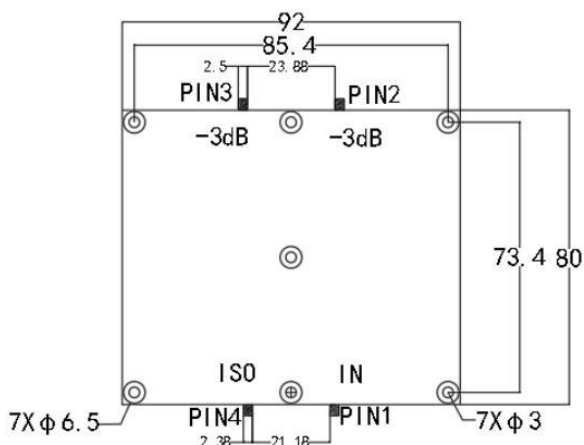
机械特性 Mechanical:

温度范围Temperature Range:	-55° C - +105° C
大小Size:	80mm*92mm
厚度Thickness:	20mm
相对湿度Relative Humidity:	0 ~ 90%

外形尺寸Outline Drawing:

Unit: mm

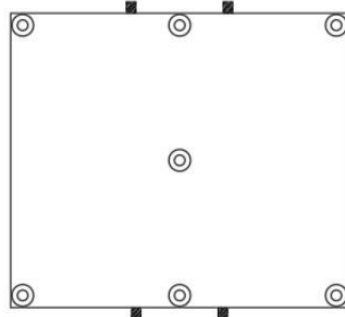
TOP VIEW



SIDE VIEW

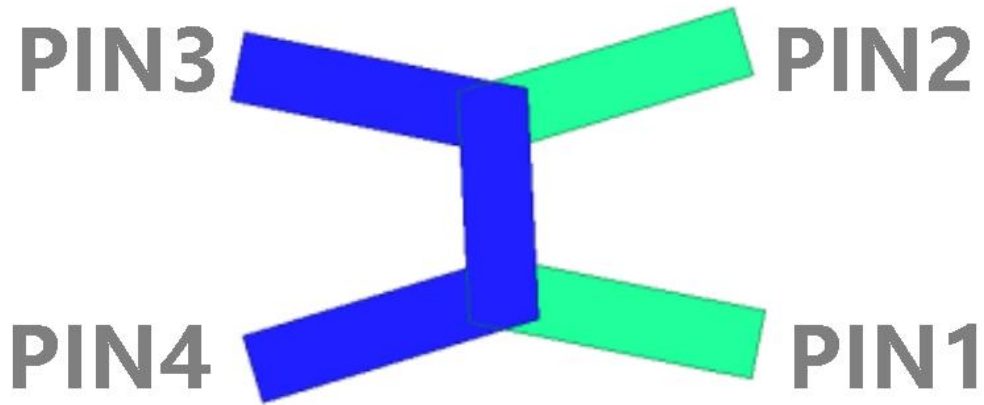


BOTTOM VIEW



端口配置表 Port Configuration Table:

Hybrid Coupler Pin Configuration



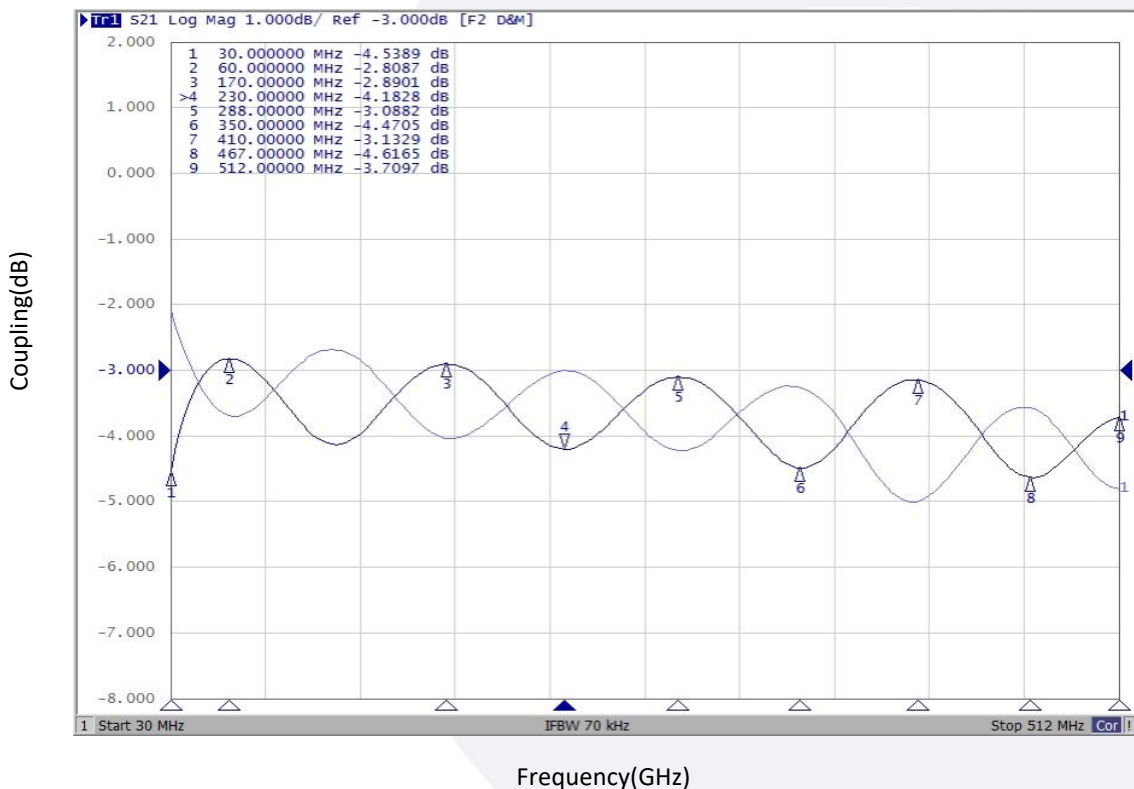
Configuration	Pin1	Pin2	Pin3	Pin4
Splitter	Input	Isolated	$-3\text{dB} < \theta < 90^\circ$	$-3\text{dB} < \theta$
Splitter	Isolated	Input	$-3\text{dB} < \theta$	$-3\text{dB} < \theta < 90^\circ$
Splitter	$-3\text{dB} < \theta < 90^\circ$	$-3\text{dB} < \theta$	Input	Isolated
Splitter	$-3\text{dB} <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

Typical Performance Data

Frequency	MHz	30	60	170	230	288	350	410	467	512
Transmission	dB	-2.08	-3.68	-4.02	-2.99	-4.21	-3.25	-4.98	-3.56	-4.79
Coupling	dB	-4.54	-2.81	-2.89	-4.18	-3.09	-4.47	-3.13	-4.62	-3.71
Insertion Loss	dB	-0.23	-0.23	-0.43	-0.58	-0.64	-0.86	-1.03	-1.09	-1.24
Isolation	dB	-38.96	-30.68	-32.82	-25.06	-26.65	-18.61	-32.80	-21.04	-22.97
Phase	degree	-90.49	-91.04	-90.21	-90.46	-89.66	-90.71	-90.50	-91.92	-91.75
VSWR	Input(P1)	/	1.06	1.11	1.05	1.14	1.08	1.12	1.46	1.35
	Transmission (P2)	/	1.03	1.04	1.02	1.16	1.21	1.30	1.08	1.28
	coupler(P3)	/	1.02	1.11	1.08	1.19	1.07	1.33	1.22	1.15
	Isolated(P4)	/	1.03	1.07	1.07	1.11	1.18	1.05	1.29	1.55

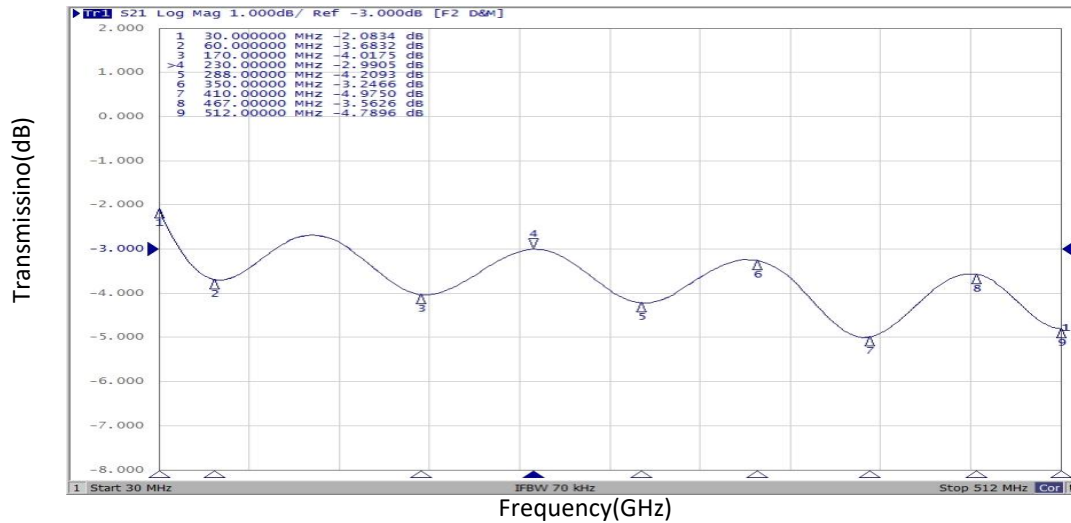
典型曲线 Typical Performance Data:

Coupling vs Frequency

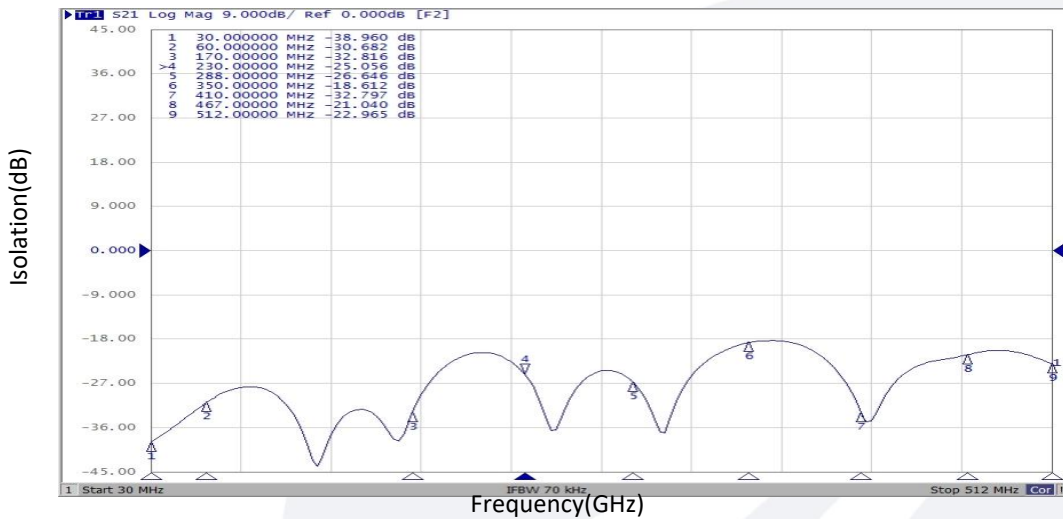


典型曲线 Typical Performance Data:

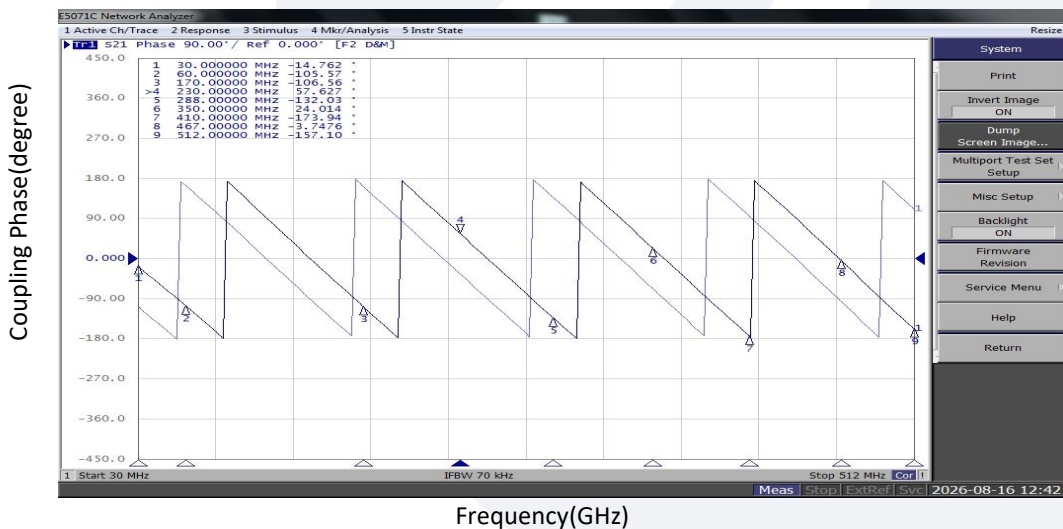
Transmission vs Frequency



Isolation vs Frequency

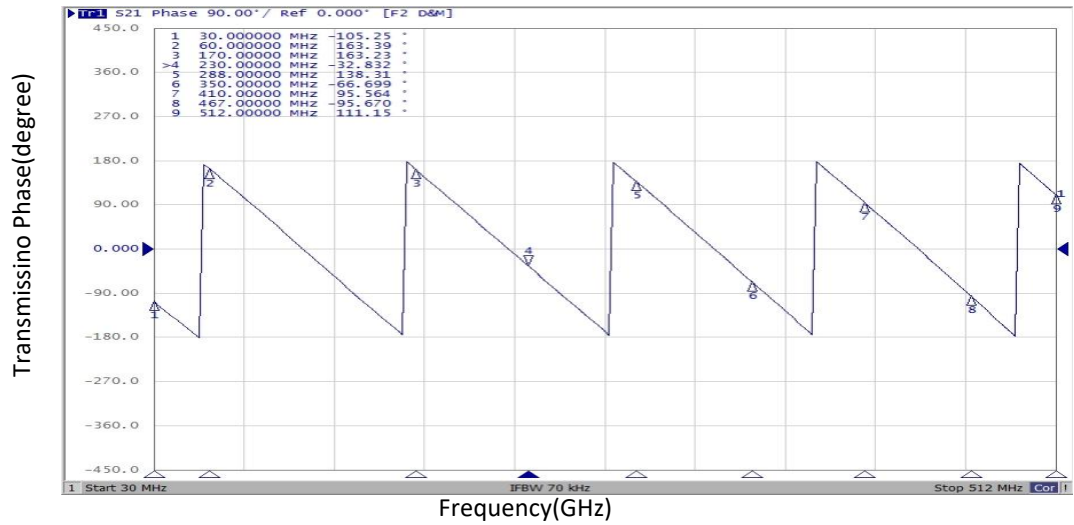


Coupling Phase vs Frequency

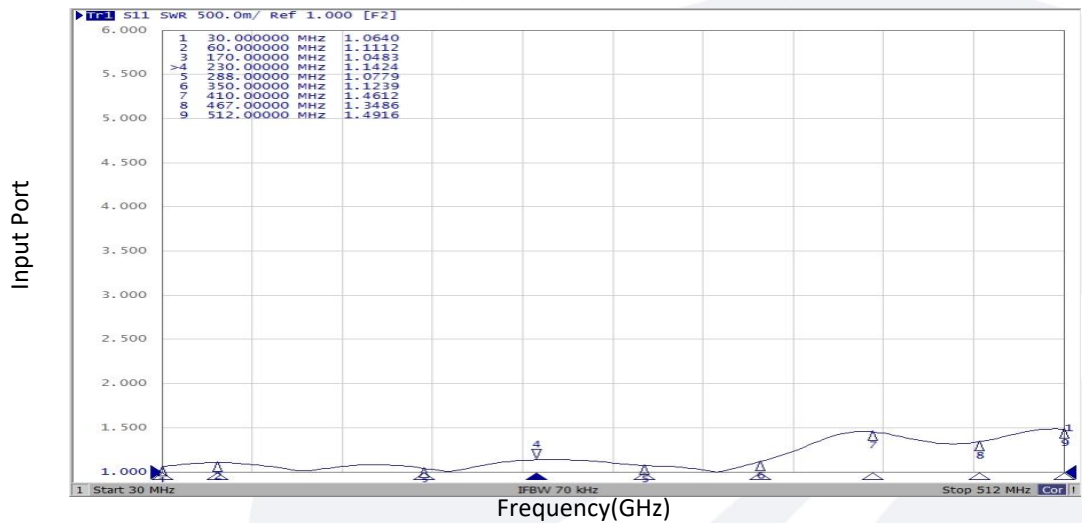


典型曲线 Typical Performance Data:

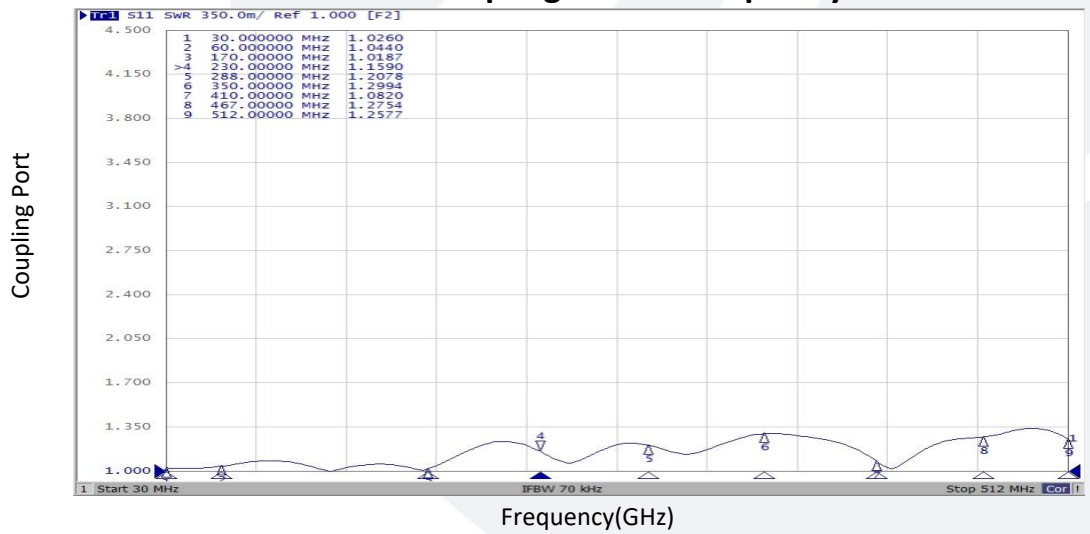
Transmission Phase vs Frequency



Input Port vs Frequency

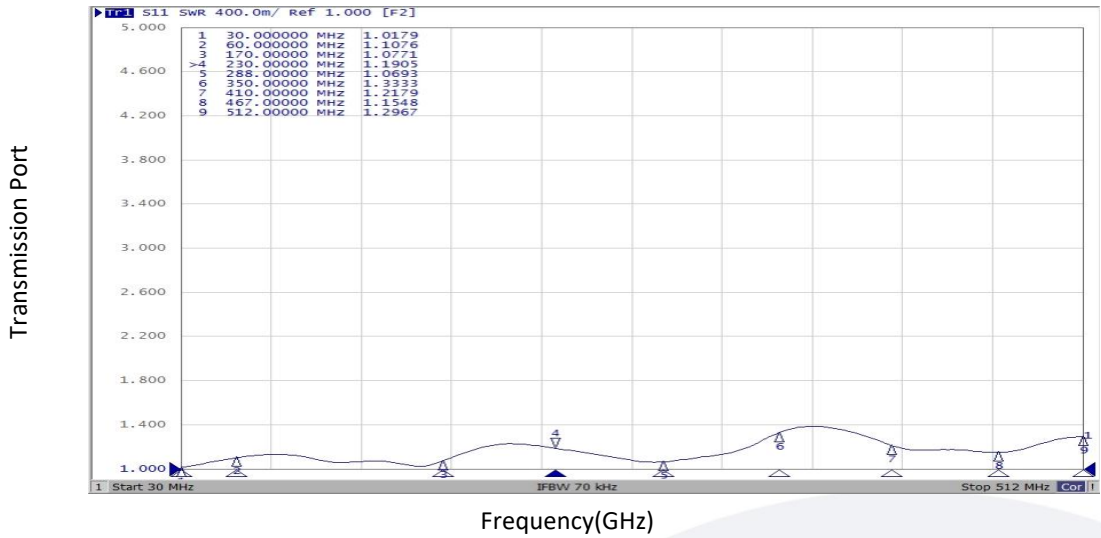


Coupling Port vs Frequency



典型曲线 Typical Performance Data:

Transmission Port vs Frequency



Isolation Port vs Frequency

