

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:	± 1.0 dB max
相位平衡Phase Balance:	90 ± 2.5 degree
耐功率 Power Handling:	300 Watt
阻抗 Impedance:	50 OHMS

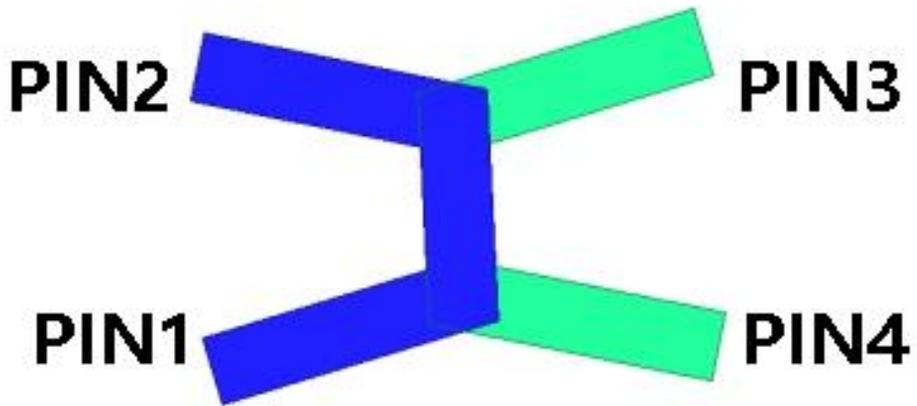
机械特性 Mechanical:

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

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

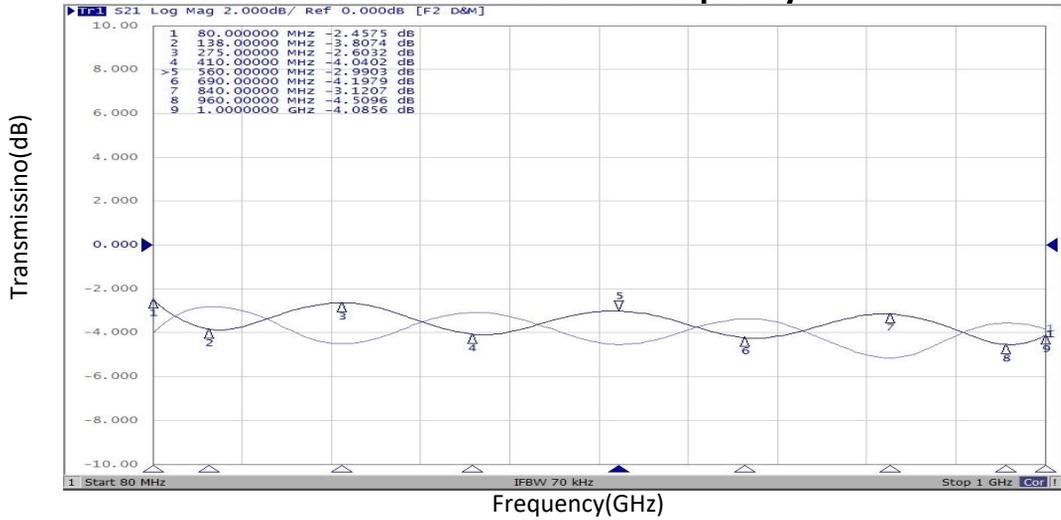
Frequency	MHz	80	138	275	410	560	690	840	960	1000	
Coupling	dB	-4.05	-2.79	-4.47	-3.04	-4.51	-3.35	-5.12	-3.53	-3.84	
Transmission	dB	-2.46	-3.81	-2.60	-4.04	-2.99	-4.20	-3.12	-4.51	-4.09	
Insertion Loss	dB	-0.24	-0.28	-0.51	-0.51	-0.71	-0.73	-0.99	-0.98	-0.95	
Isolation	dB	-49.00	-35.73	-26.11	-37.33	-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:

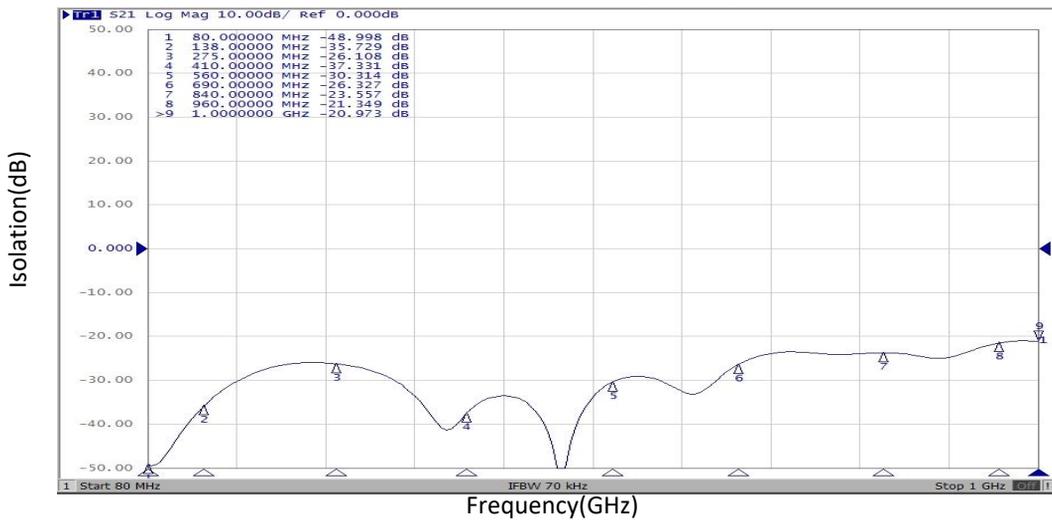
Coupling vs Frequency

Coupling(dB)

Transmission vs Frequency



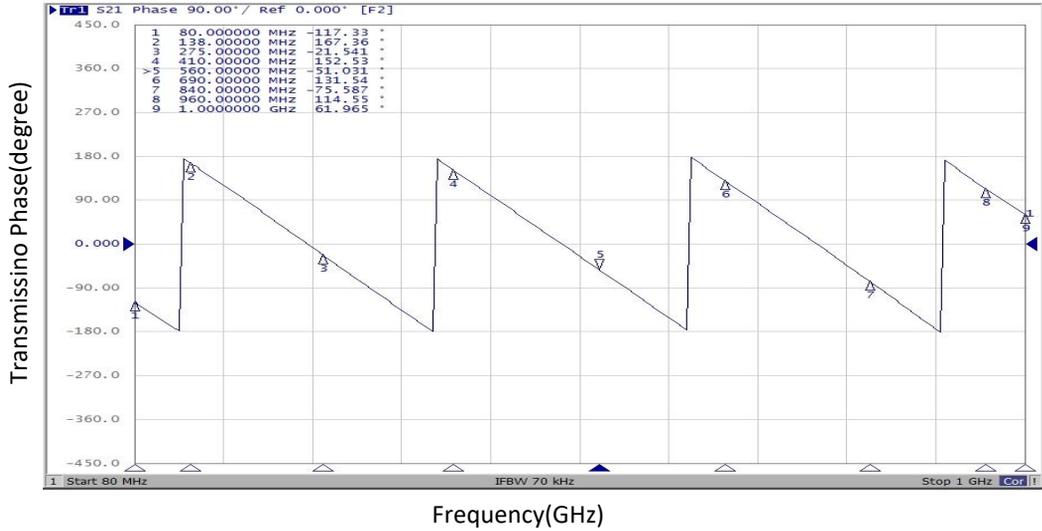
Isolation vs Frequency



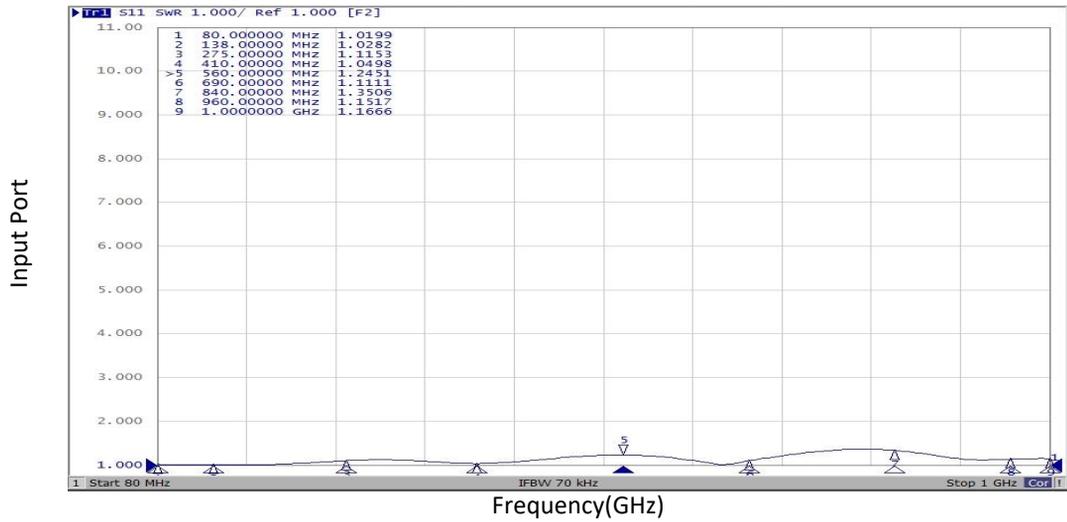
Coupling Phase vs Frequency

Coupling Phase (degree)

Transmission Phase vs Frequency



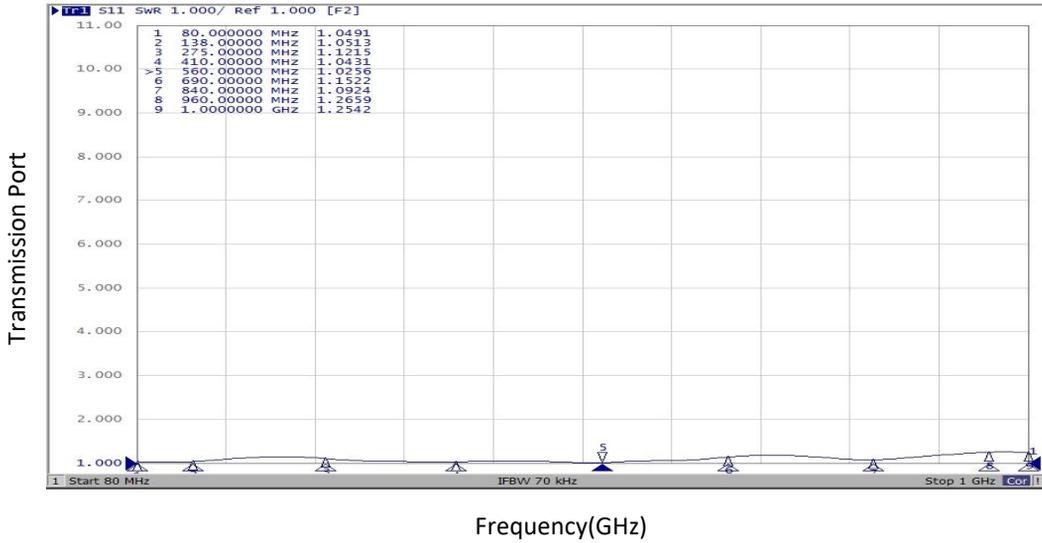
Input Port vs Frequency



Coupling Port vs Frequency

Coupling Port

Transmission Port vs Frequency



Isolation Port vs Frequency

