

90 Degree 3dB Bridge

电气特性 Electrical:

工作频率 Frequency Range:	225-450MHz
耦合度Coupling :	3dB
插入损耗 Insertion Loss:	0.15dB Max
隔离度Isolation:	-25.0dB Min
驻波 VSWR:	1.15:1 Max
幅度平衡 Amplitude Balance:	± 0.40 dB max
相位平衡 Phase Balance:	90 ± 2.5 degree
耐功率 Power Handling:	500 Watt
阻抗 Impedance:	50 OHMS

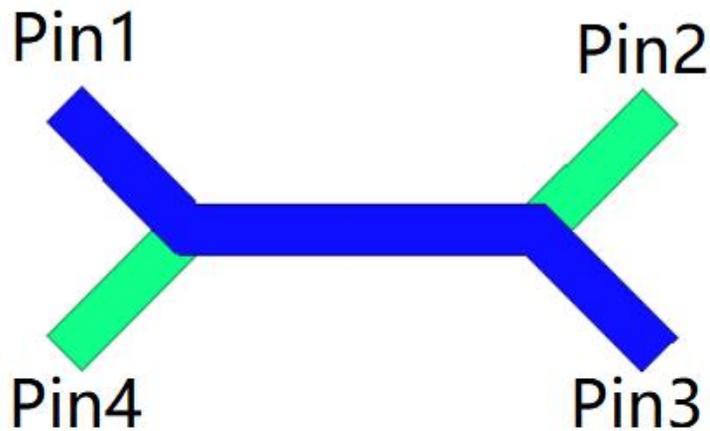
机械特性 Mechanical:

温度范围Temperature Range:	-55° C - +105° C
大小Size:	38.1mm*27.94mm
厚度Thickness:	4.5mm
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	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

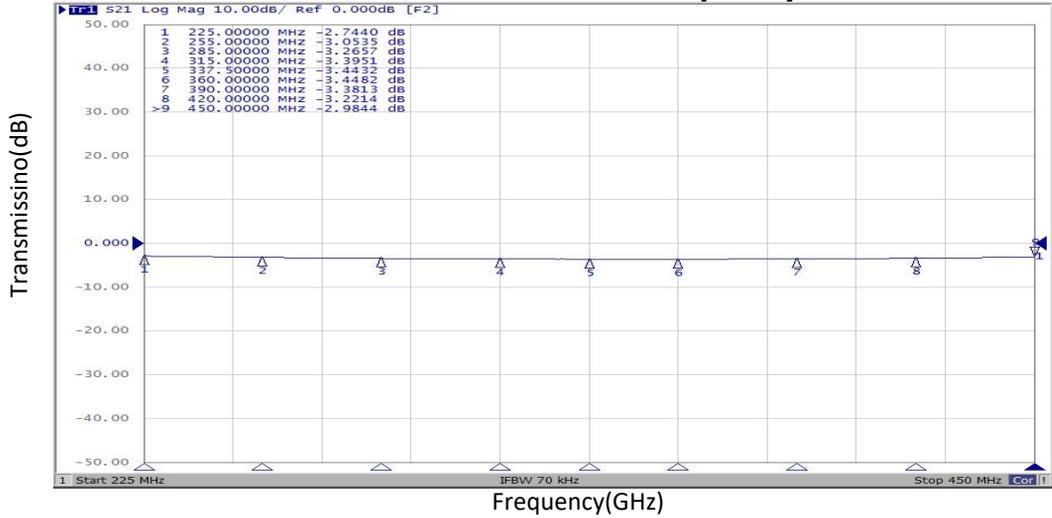
Frequency	MHz	225	255	285	315	337.5	360	390	420	450
Coupling	dB	-3.43	-3.11	-2.89	-2.76	-2.72	-2.72	-2.79	-2.96	-3.23
Transmission	dB	-2.74	-3.05	-3.27	-3.40	-3.45	-3.45	-3.38	-3.22	-2.98
Insertion Loss	dB	-0.08	-0.07	-0.07	-0.07	-0.08	-0.08	-0.08	-0.08	-0.10
Isolation	dB	-29.04	-30.17	-31.68	-33.57	-35.13	-36.24	-35.45	-32.36	-28.98
Phase	degree	89.02	88.38	88.71	90.17	91.60	92.47	91.91	90.22	90.26
Return Loss	Input	dB	1.09	1.08	1.06	1.05	1.04	1.03	1.01	1.01
	Coupler	dB	1.10	1.08	1.06	1.05	1.03	1.02	1.02	1.04
	Transmission	dB	1.10	1.09	1.07	1.06	1.05	1.04	1.02	1.00
	Isolated	dB	1.10	1.09	1.07	1.05	1.04	1.02	1.00	1.03

典型曲线 Typical Performance Data:

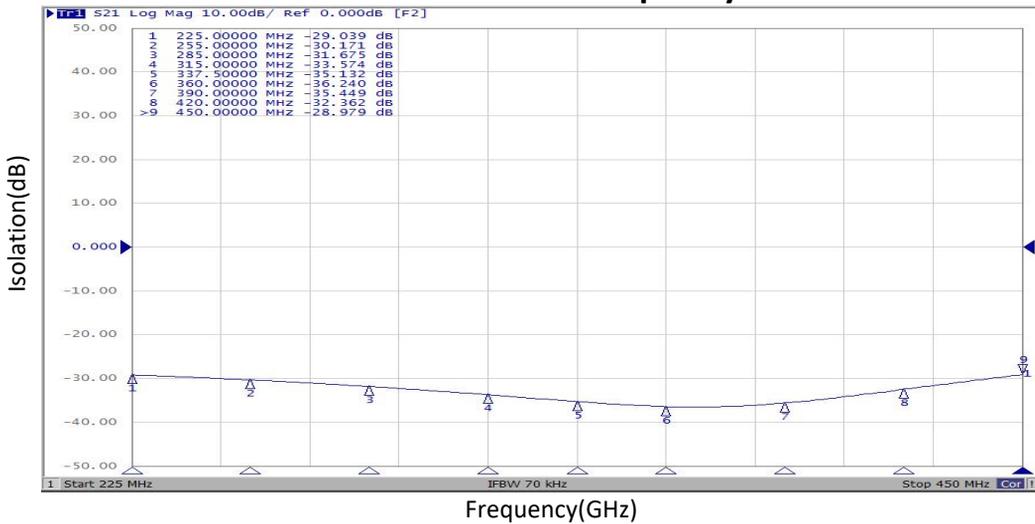
Coupling vs Frequency

Coupling(dB)

Transmission vs Frequency



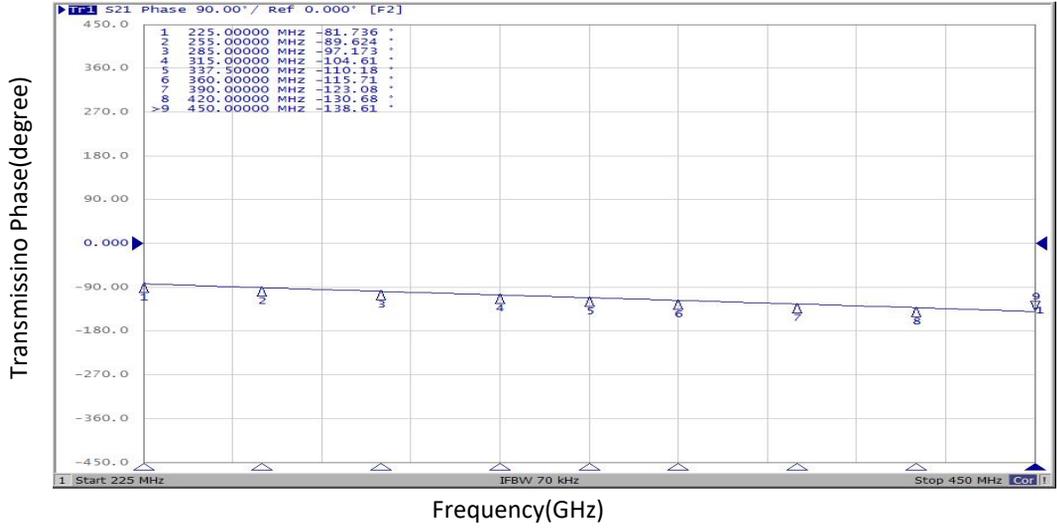
Isolation vs Frequency



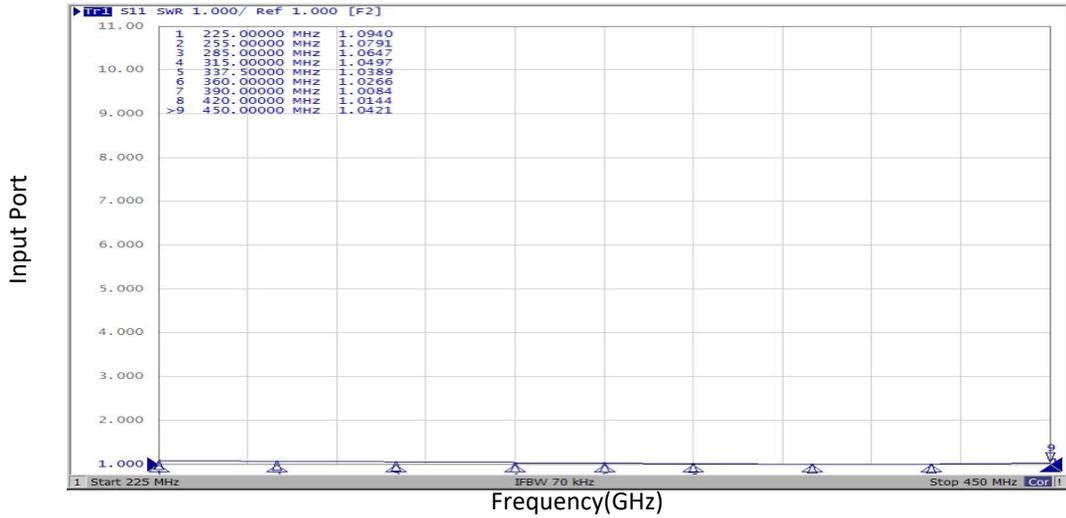
Coupling Phase vs Frequency

Coupling Phase (degree)

Transmission Phase vs Frequency



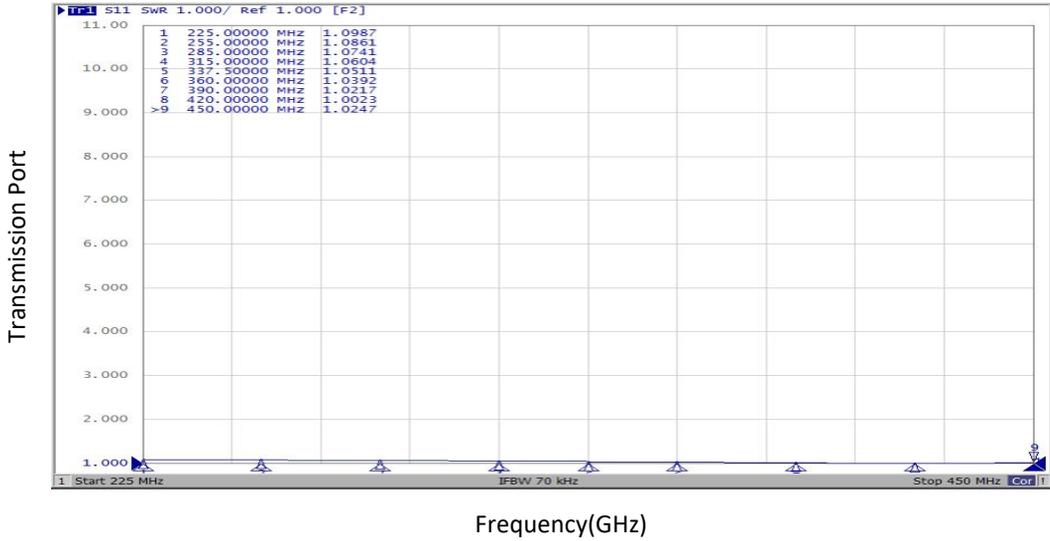
Input Port vs Frequency



Coupling Port vs Frequency

Coupling Port

Transmission Port vs Frequency



Isolation Port vs Frequency

