

Part No.: TBG-0225045-3S-90-SMD

90 Degree 3dB Bridge

电气特性 Electrical:

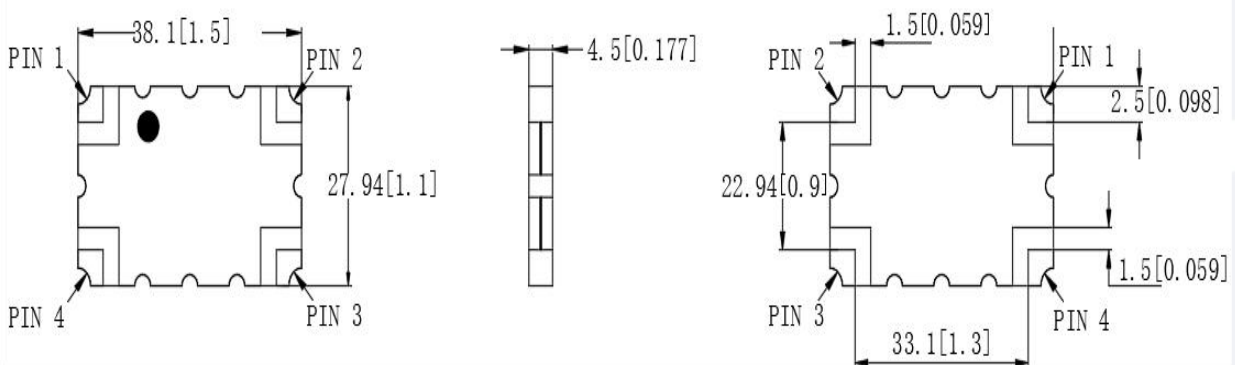
| | |
|-------------------------|---------------------|
| 工作频率 Frequency Range: | 225-450MHz |
| 耦合度Coupling : | 3dB |
| 插入损耗 Insertion Loss: | 0.15dB Max |
| 隔离度Isolation: | -25.0dB Min |
| 驻波 VSWR: | 1.15:1 Max |
| 幅度平衡 Amplitude Balance: | ± 0.40 dB max |
| 相位平衡Phase Balance: | 90 ± 2.5 degree |
|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

机械特性 Mechanical:

| | |
|------------------------|--|
| 温度范围Temperature Range: | $-55^{\circ} \text{C} - +105^{\circ} \text{C}$ |
| 大小Size: | 38.1mm*27.94mm |
| 厚度Thickness: | 4.5mm |
| 相对湿度Relative Humidity: | 0 ~ 90% |

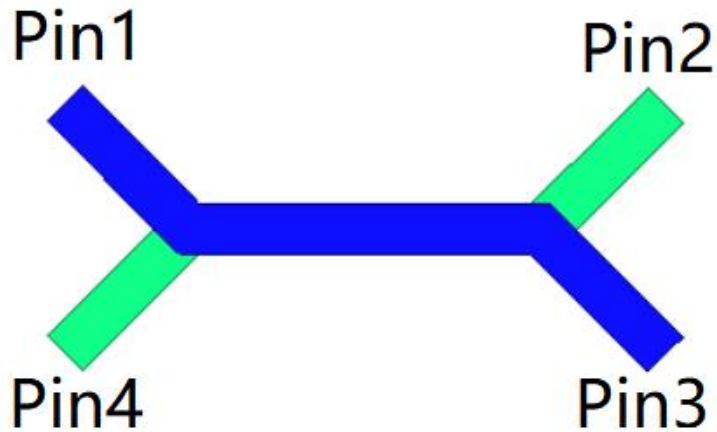
外形尺寸Outline Drawing:

Unit: mm(Inches)



端口配置表 Port Configuration Table:

Hybrid Coupler Pin Configuration



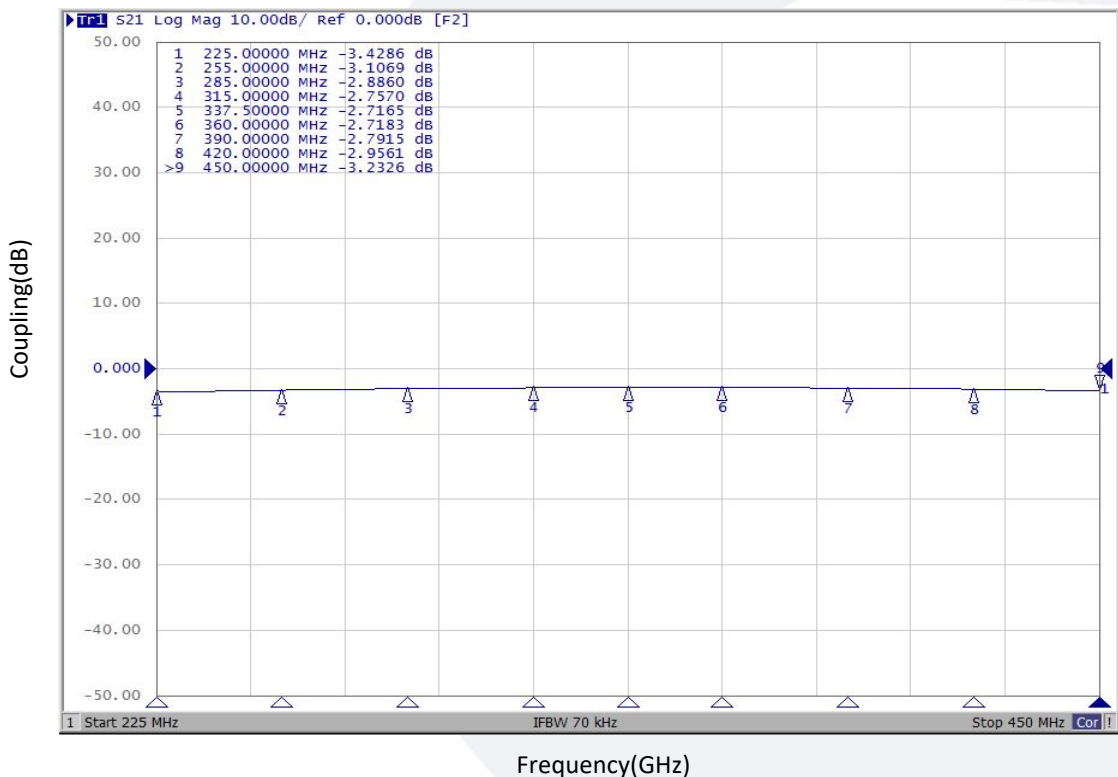
| Configuration | Pin1 | Pin2 | Pin3 | Pin4 |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Splitter | Input | Isolated | $-3dB < \theta - 90^\circ$ | $-3dB < \theta$ |
| Splitter | Isolated | Input | $-3dB < \theta$ | $-3dB < \theta - 90^\circ$ |
| Splitter | $-3dB < \theta - 90^\circ$ | $-3dB < \theta$ | Input | Isolated |
| Splitter | $-3dB < \theta$ | $-3dB < \theta - 90^\circ$ | 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 | 1.04 |
| | Coupler | dB | 1.10 | 1.08 | 1.06 | 1.05 | 1.03 | 1.02 | 1.02 | 1.04 | 1.08 |
| | Transmission | dB | 1.10 | 1.09 | 1.07 | 1.06 | 1.05 | 1.04 | 1.02 | 1.00 | 1.02 |
| | Isolated | dB | 1.10 | 1.09 | 1.07 | 1.05 | 1.04 | 1.02 | 1.00 | 1.03 | 1.06 |

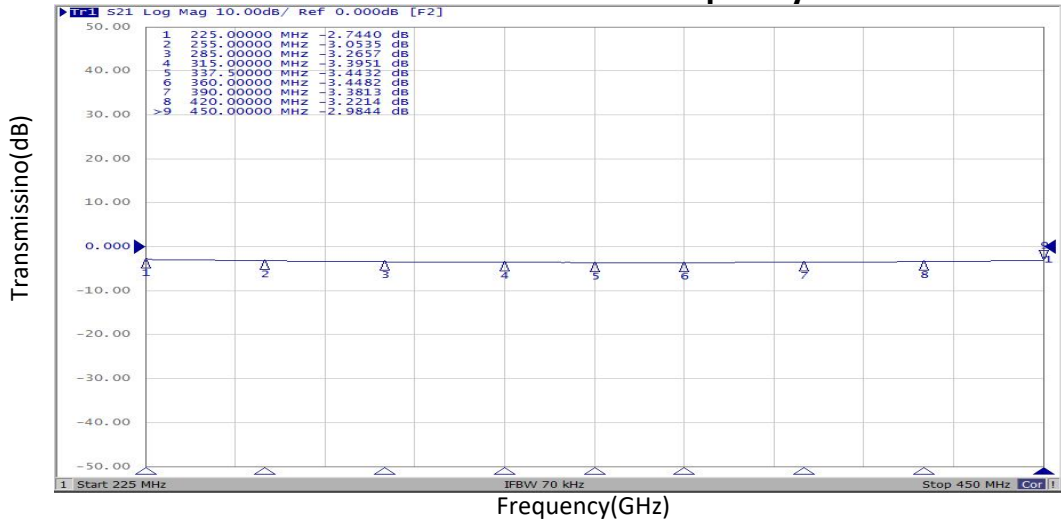
典型曲线 Typical Performance Data:

Coupling vs Frequency

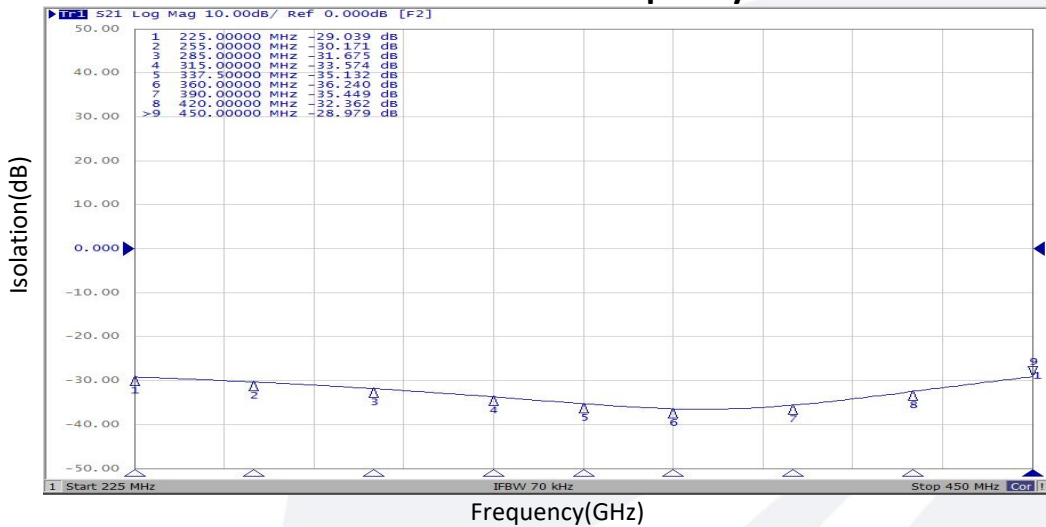


典型曲线 Typical Performance Data:

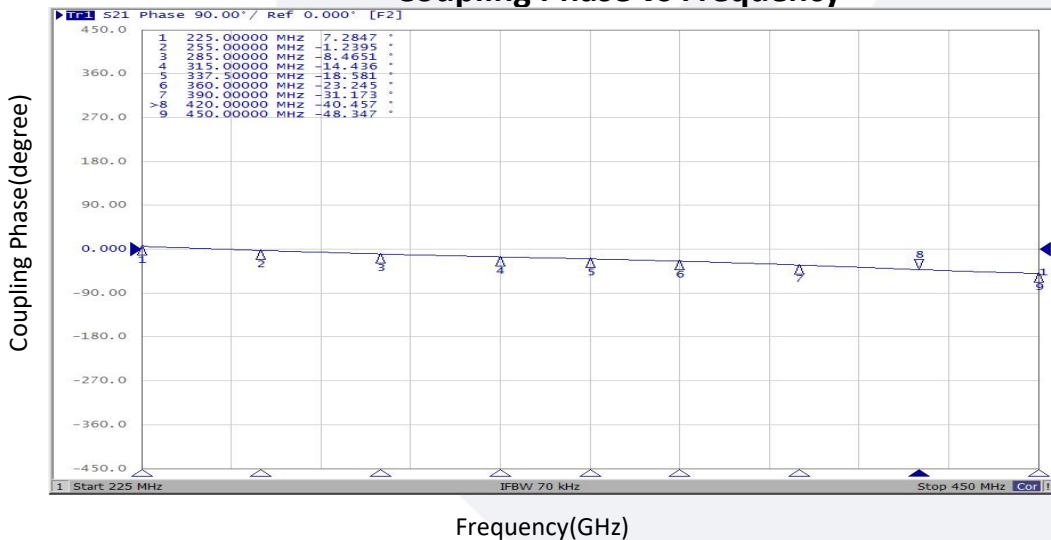
Transmission vs Frequency



Isolation vs Frequency

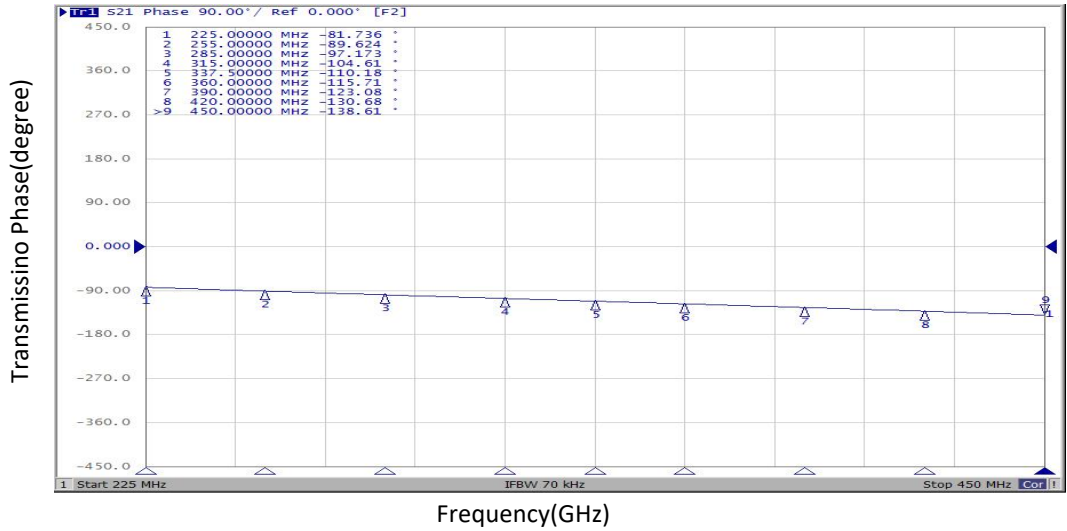


Coupling Phase vs Frequency

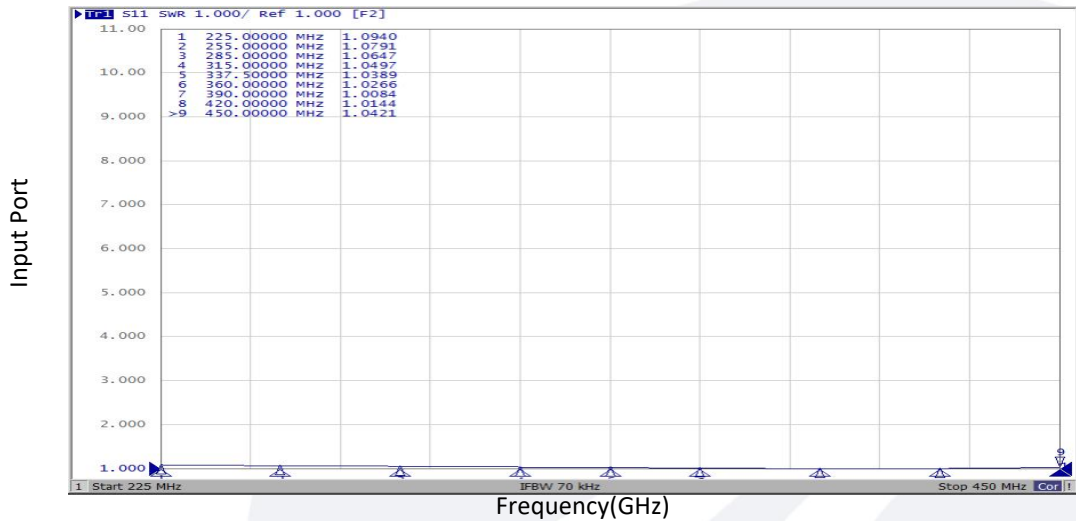


典型曲线 Typical Performance Data:

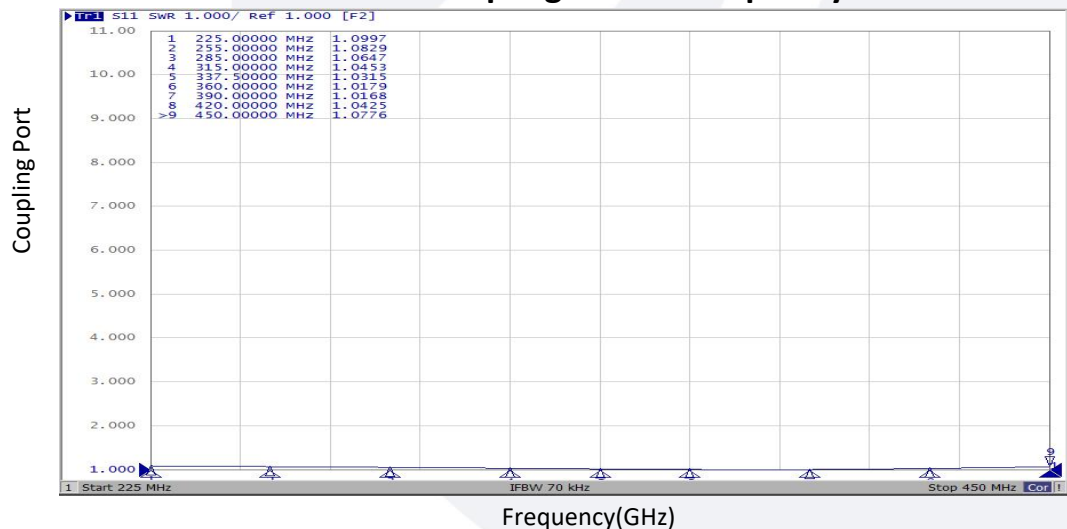
Transmission Phase vs Frequency



Input Port vs Frequency

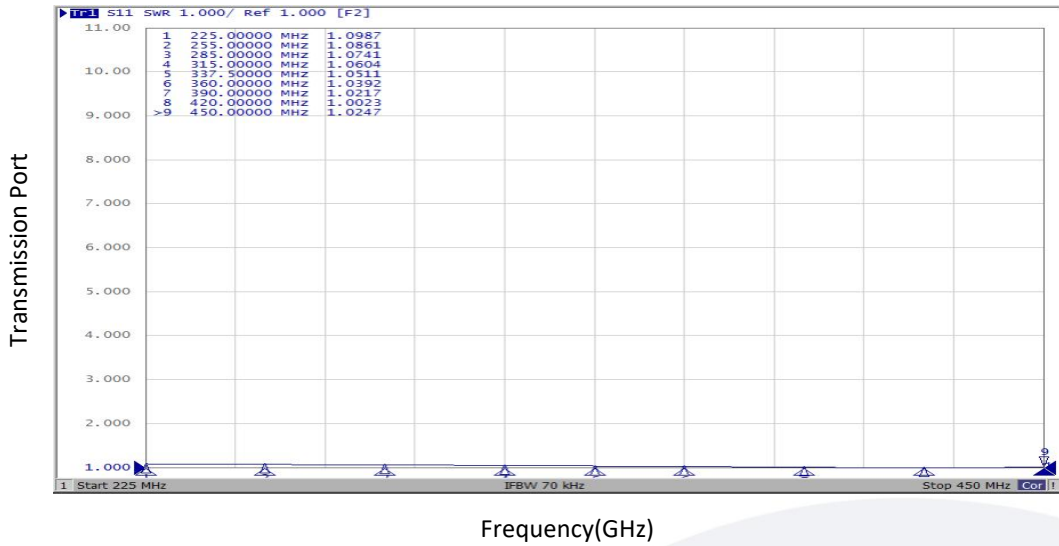


Coupling Port vs Frequency



典型曲线 Typical Performance Data:

Transmission Port vs Frequency



Isolation Port vs Frequency

