

**Part No.: TDC-003052-42N-300-SMD**

**42dB Directional Coupler 0.03-0.52GHz**

**电气特性 Electrical:**

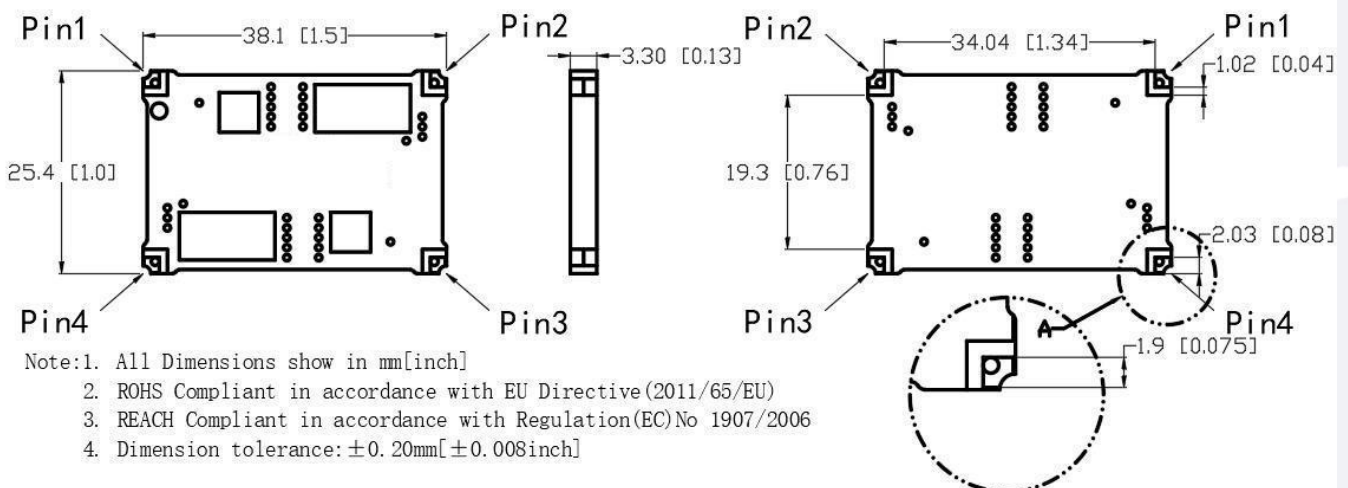
工作频率 Frequency Range: 30-200MHz;200-520MHz  
 耦合度Coupling :  $42 \pm 1.2\text{dB}; 42 \pm 1.0\text{dB}$   
 插入损耗 Insertion Loss: 0.10dB ;0.25dB  
 驻波 VSWR: 1.10:1 Max  
 方向性 Directivity: 28.0dB Min  
 耐功率 Power Handling: 300 Watt  
 阻抗 Impedance: 50 OHMS

**机械特性 Mechanical:**

温度范围Temperature Range:  $-55^{\circ}\text{C} - +105^{\circ}\text{C}$   
 大小Size: 38.1mm\*25.4mm  
 厚度Thickness: 3.3mm  
 相对湿度Relative Humidity: 0 ~ 90%

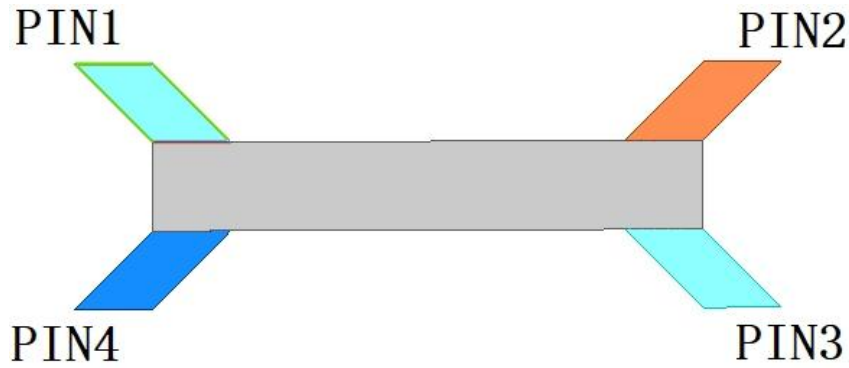
**外形尺寸Outline Drawing:**

Unit: mm



**端口配置表 Port Configuration Table:**

Hybrid Coupler Pin Configuration



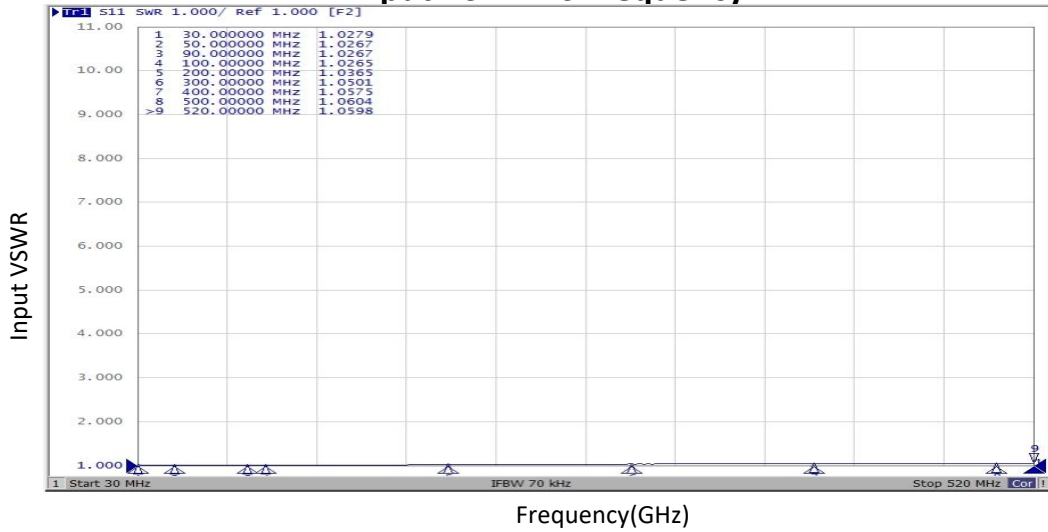
PIN1	PIN2	PIN3	PIN4
Input	Reflected Coupled	Transmission	Forward Coupled
Transmission	Forward Coupled	Input	Reflected Coupled

Typical Performance Data

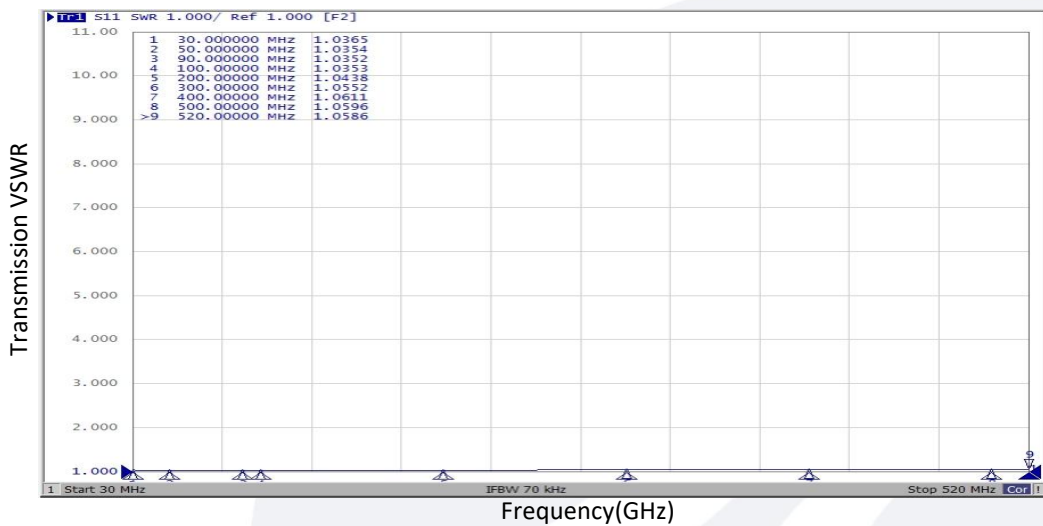
Frequency	MHz	30	50	90	100	200	300	400	500	520
Coupling	dB	-43.45	-41.51	-40.55	-40.55	-41.30	-41.77	-41.84	-41.72	-41.74
Insertion Loss	dB	-0.024	-0.028	-0.038	-0.041	-0.074	-0.138	-0.184	-0.233	-0.239
Directivity	dB	-33.94	-32.97	-31.57	-35.54	-30.35	-31.76	-31.55	-31.79	-32.09
VSWR	Input	/	1.03	1.03	1.03	1.03	1.04	1.05	1.06	1.06
	Transmission	/	1.04	1.04	1.04	1.04	1.04	1.05	1.05	1.05

典型曲线 Typical Performance Data:

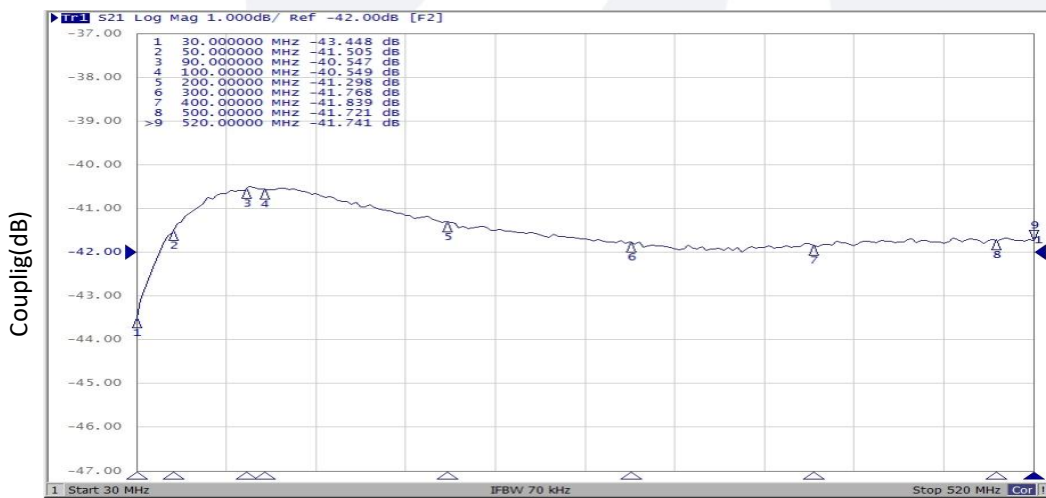
**Input VSWR vs Frequency**



**Transmission VSWR vs Frequency**

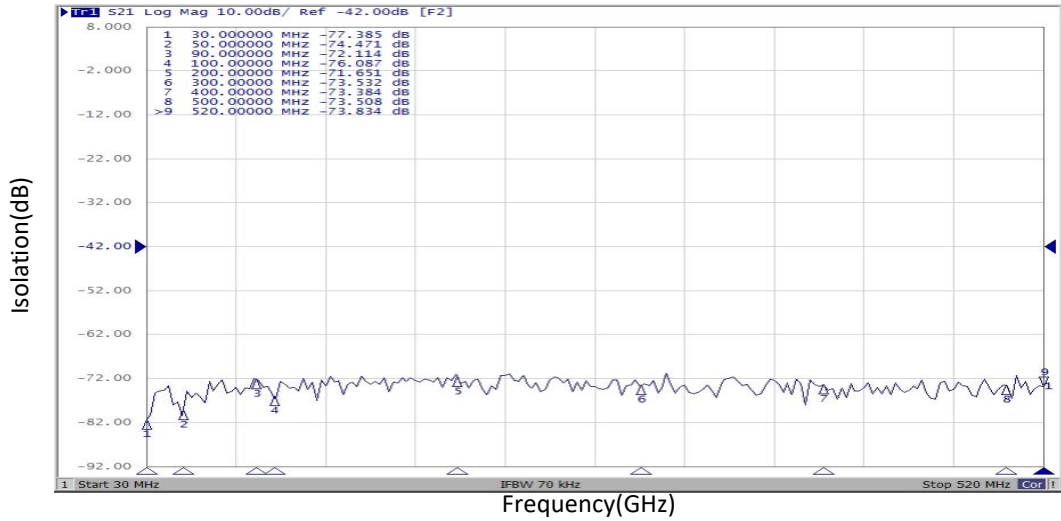


**Coupling vs Frequency**



典型曲线 Typical Performance Data:

Isolation vs Frequency



Insertion Loss vs Frequency

