

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

## 42dB Directional Coupler 0.03-0.52GHz

### Electrical:

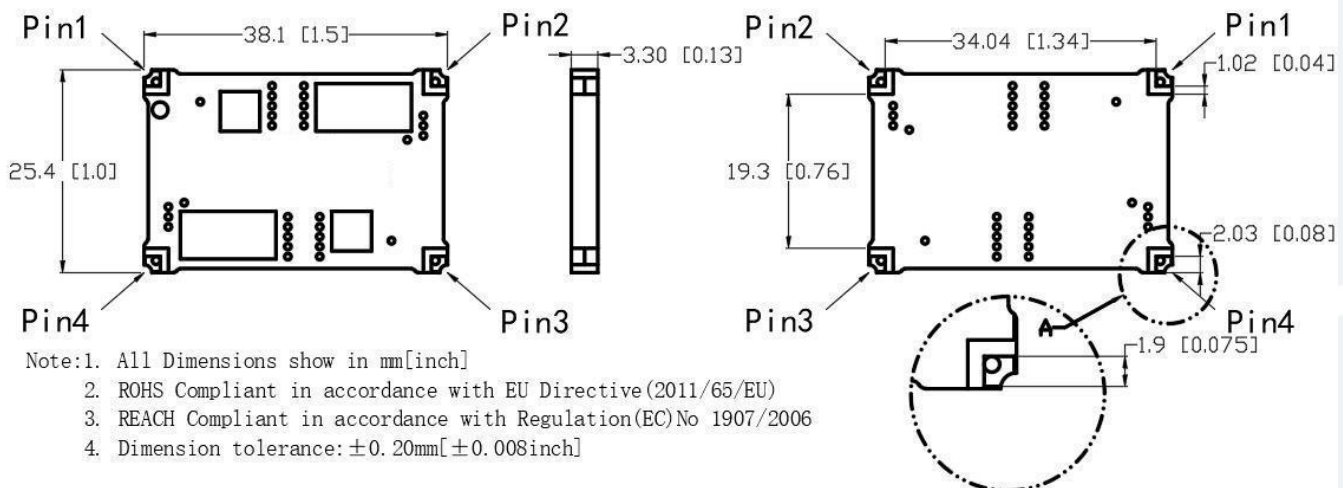
Frequency Range:	30-200MHz;200-520MHz
Coupling :	42 ± 1.2dB;42 ± 1.0dB
Insertion Loss:	0.10dB ;0.25dB
VSWR:	1.10:1 Max
Directivity:	28.0dB Min
Power Handling:	300 Watt
Impedance:	50 OHMS

### Mechanical:

Temperature Range:	-55° C - +105° C
Size:	38.1mm*25.4mm
Thickness:	3.3mm
Relative Humidity:	0 ~ 90%

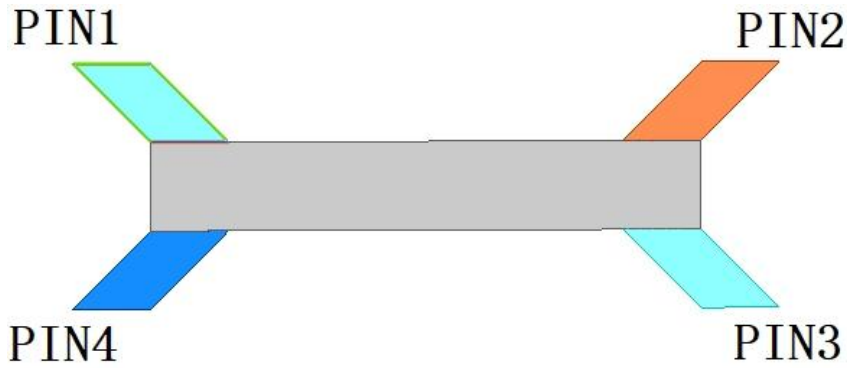
### Outline Drawing:

Unit: mm



**Port Configuration Table:**

Hybrid Coupler Pin Configuration



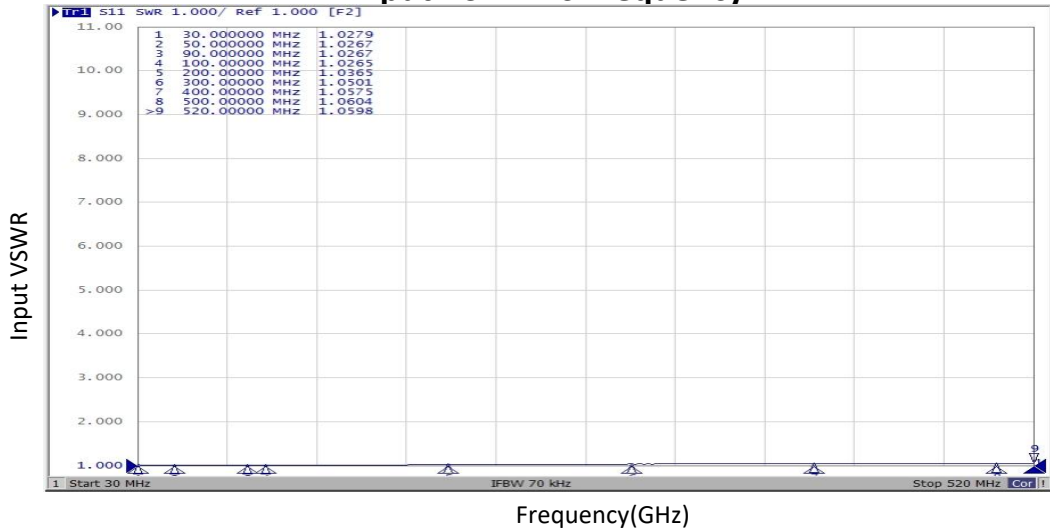
PIN1	PIN2	PIN3	PIN4
Input	Reflected Coupled	Transmission	Forward Coupled
Transmission	Forward Coupled	Input	Reflected Coupled

Typical Performance Data

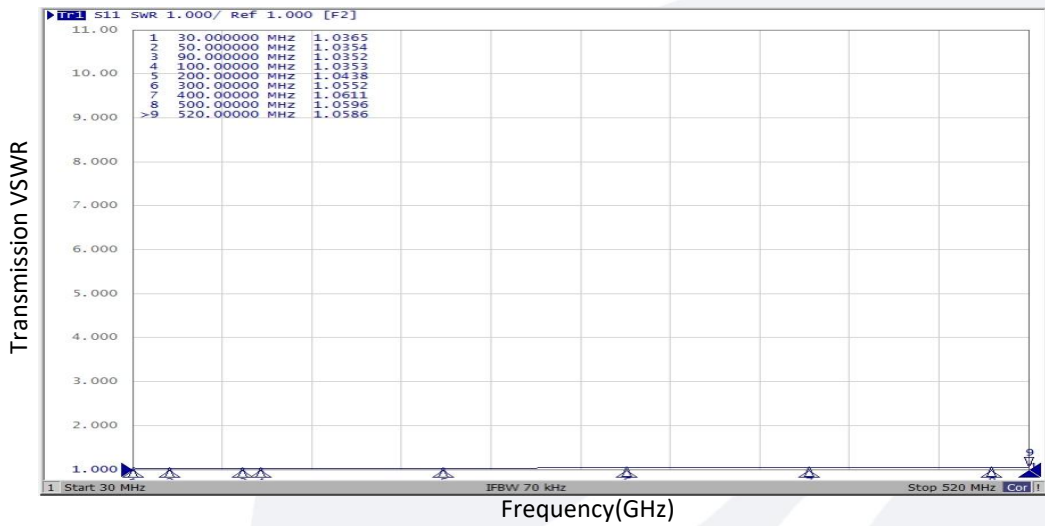
Frequency	MHz	30	50	90	100	200	300	400	500	520
Coupling	dB	-43.45	-41.51	-40.55	-40.55	-41.30	-41.77	-41.84	-41.72	-41.74
Insertion Loss	dB	-0.024	-0.028	-0.038	-0.041	-0.074	-0.138	-0.184	-0.233	-0.239
Directivity	dB	-33.94	-32.97	-31.57	-35.54	-30.35	-31.76	-31.55	-31.79	-32.09
VSWR	Input	/	1.03	1.03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

Typical Performance Data:

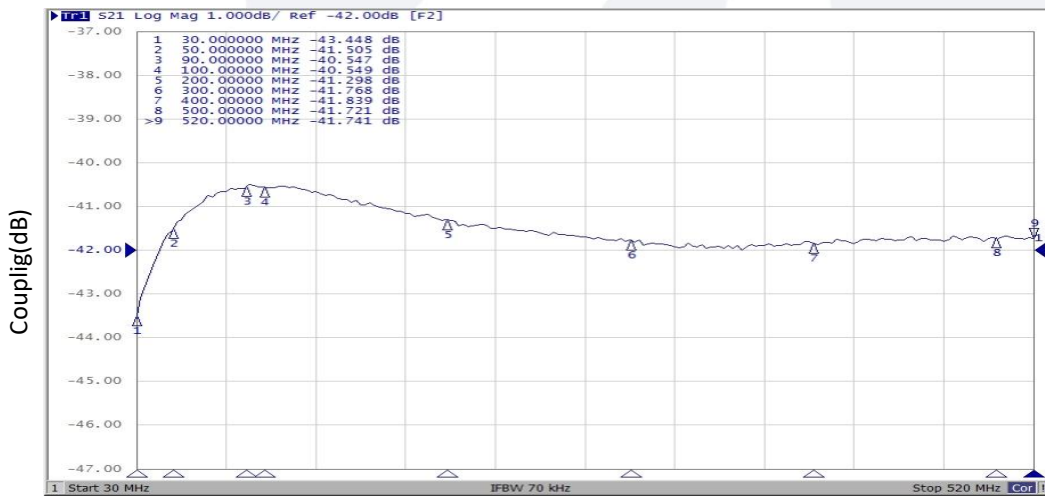
**Input VSWR vs Frequency**



**Transmission VSWR vs Frequency**

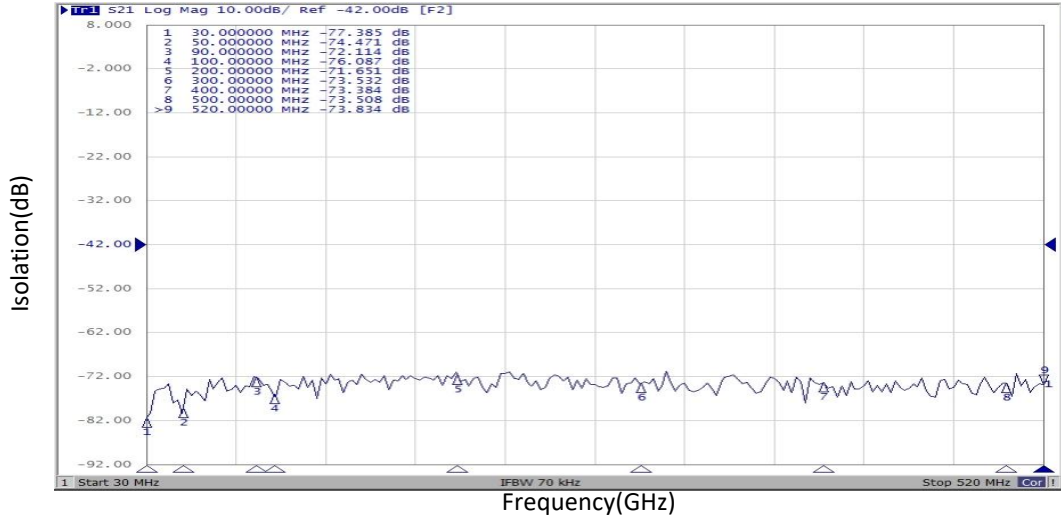


**Coupling vs Frequency**



Typical Performance Data:

Isolation vs Frequency



Insertion Loss vs Frequency

