

Part No.: TDC-003052-45N-300-SMD

45dB Directional Coupler 0.03-0.52GHz

Electrical:

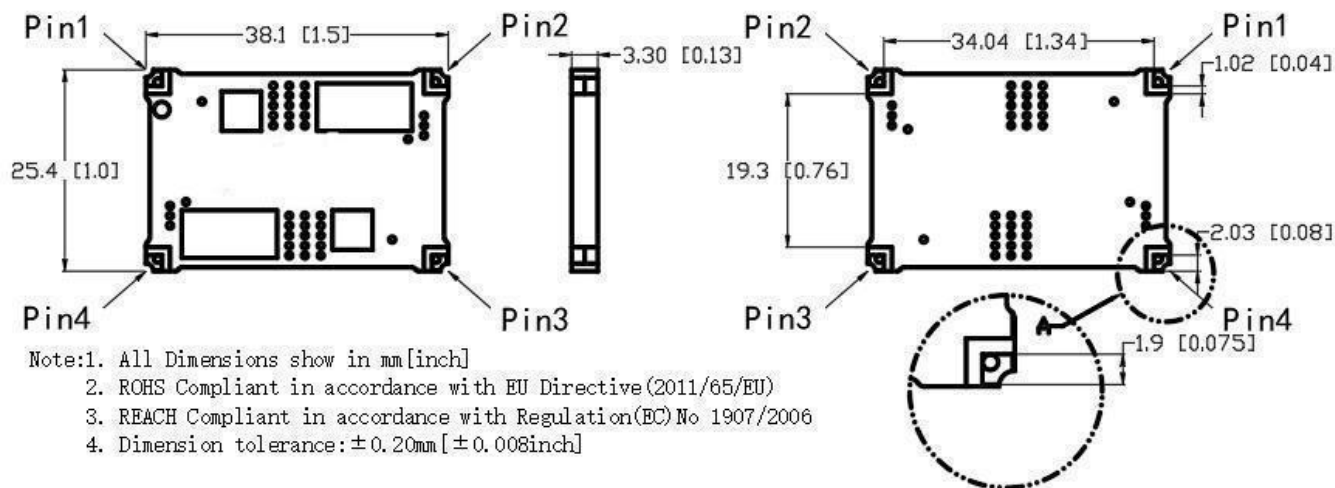
Frequency Range:	30-520MHz
Coupling :	$45 \pm 1.0\text{dB}$
Insertion Loss:	0.2dB Max
VSWR:	1.10:1 Max
Directivity:	25.0dB Min
Power Handling:	300 Watt
Impedance:	50 OHMS

Mechanical:

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

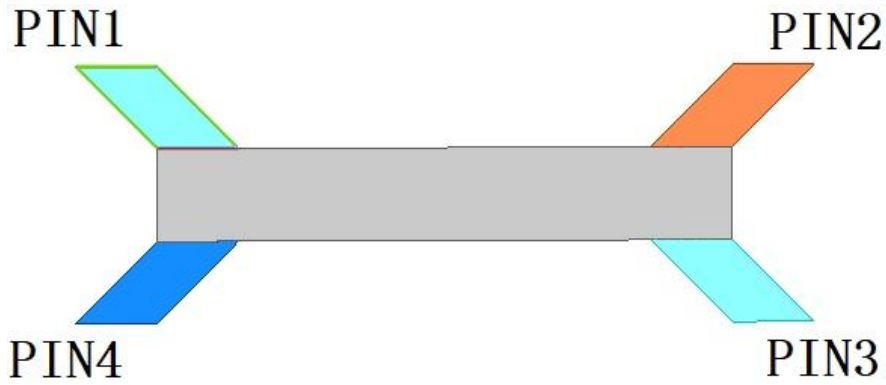
Outline Drawing:

Unit: mm



Port Configuration Table:

Hybrid Coupler Pin Configuration



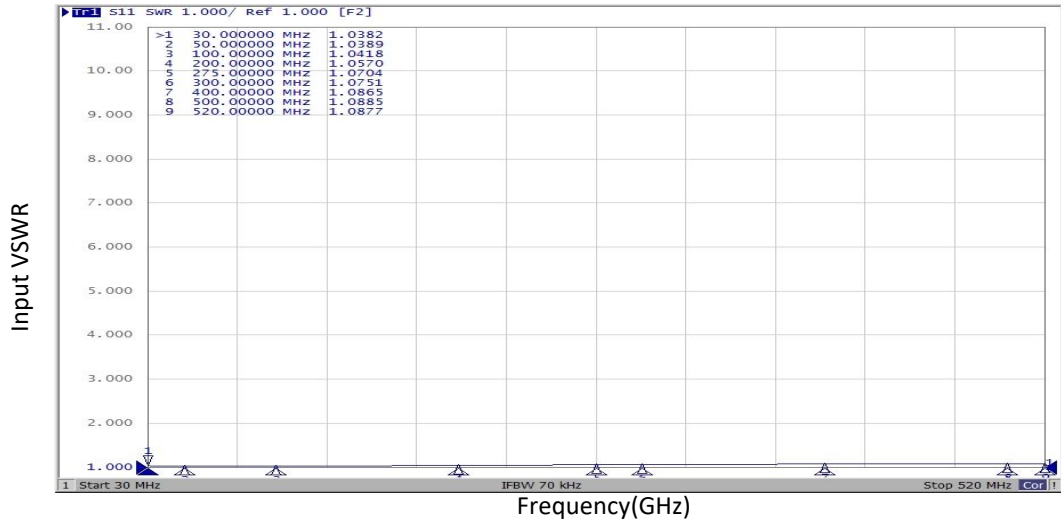
PIN1	PIN2	PIN3	PIN4
Input	Reflected Coupled	Transmission	Forward Coupled
Transmission	Forward Coupled	Input	Reflected Coupled

Typical Performance Data

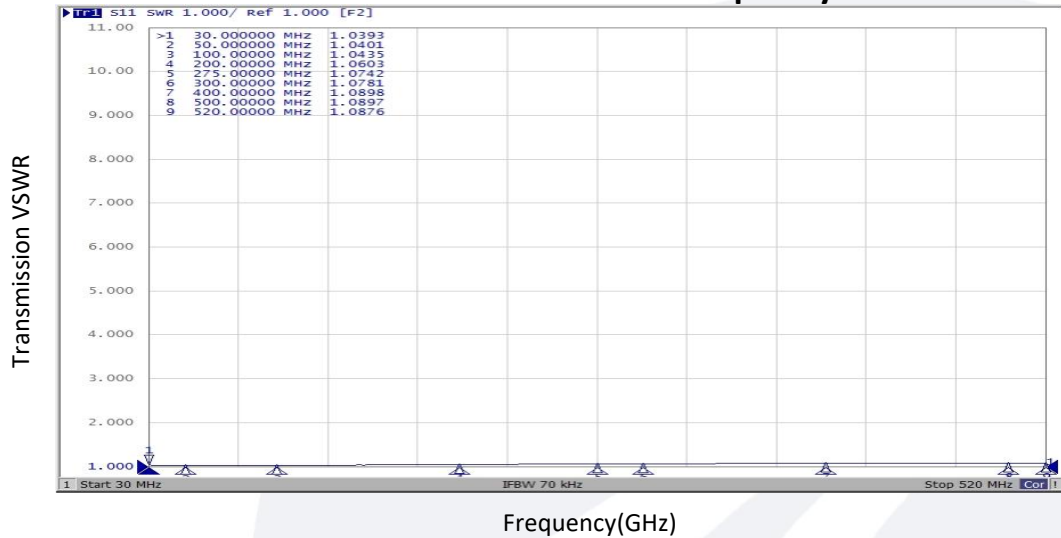
Frequency	MHz	30	50	100	200	275	300	400	500	520
Coupling	dB	-45.84	-44.57	-44.83	-45.05	-44.70	-44.74	-44.44	-44.16	-44.19
Insertion Loss	dB	-0.0002	-0.005	-0.02	-0.04	-0.09	-0.10	-0.12	-0.15	-0.15
Directivity	dB	-28.68	-27.71	-30.03	-28.17	-28.37	-28.49	-27.36	-28.26	-27.37
VSWR	Input	/	1.04	1.04	1.04	1.06	1.07	1.08	1.09	1.09
	Transmission	/	1.04	1.04	1.04	1.06	1.07	1.08	1.09	1.09

Typical Performance Data:

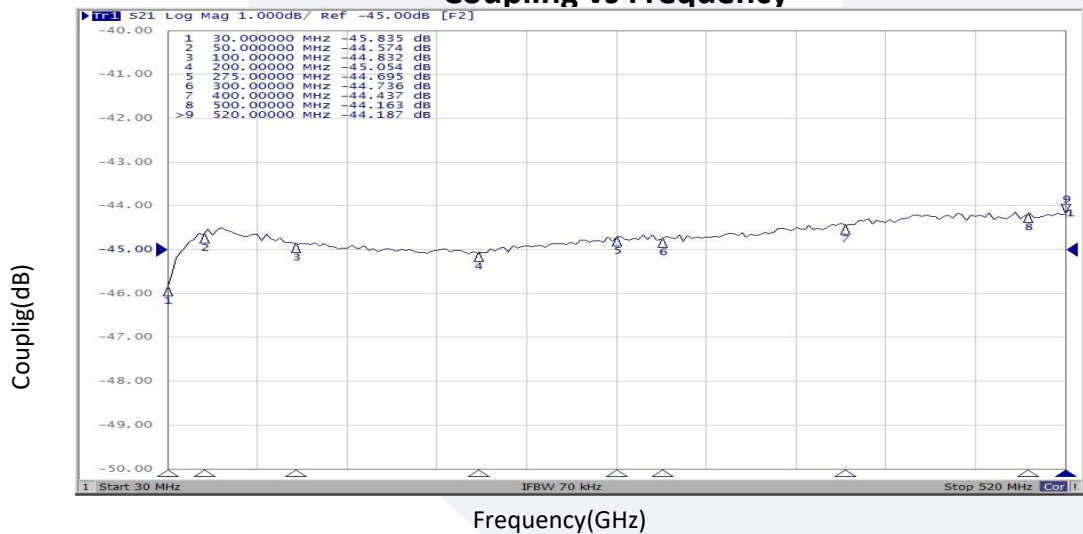
Input VSWR vs Frequency



Transmission VSWR vs Frequency

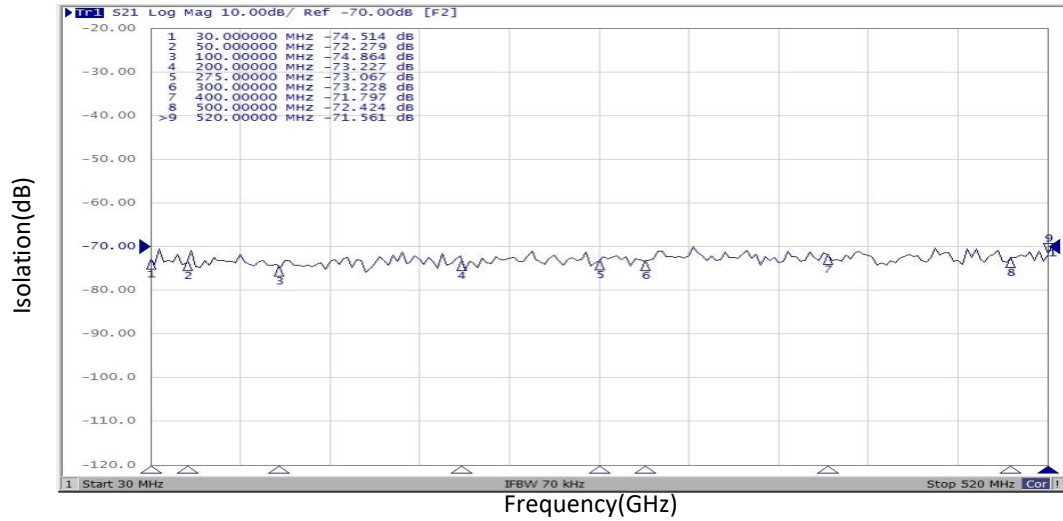


Coupling vs Frequency



Typical Performance Data:

Isolation vs Frequency



Insertion Loss vs Frequency

