

Part No.: TDC-002100-50N-300-SMD

50dB Directional Coupler 0.02-1GHz

Electrical:

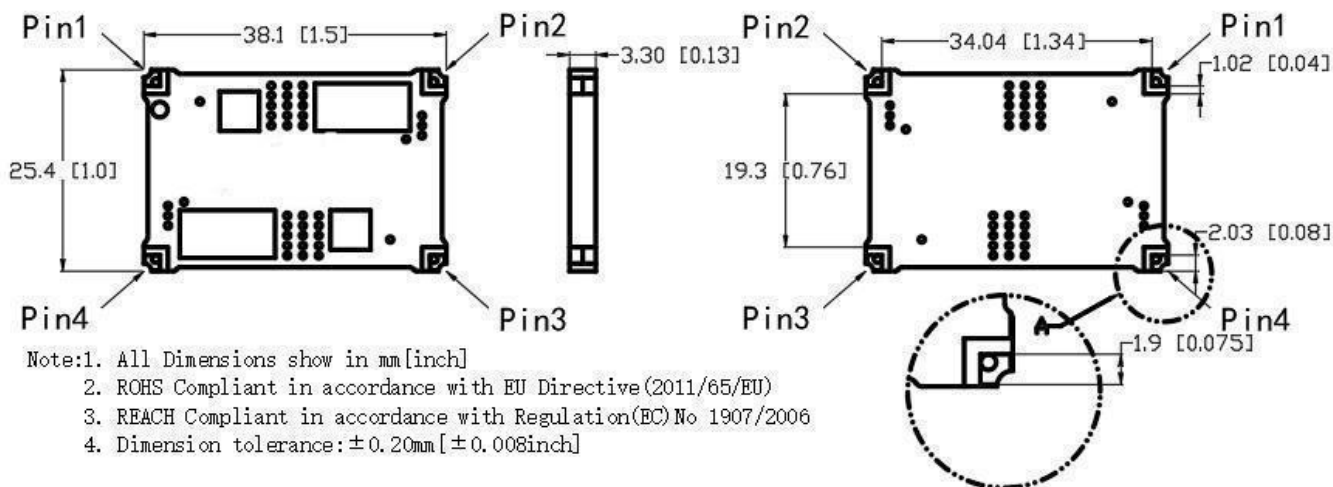
Frequency Range:	20-1000MHz
Coupling :	$50 \pm 1.0\text{dB}$
Insertion Loss:	0.3dB Max
VSWR:	1.20:1 Max
Directivity:	20.0dB Min
Power Handling:	300 Watt
Impedance:	50 OHMS

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



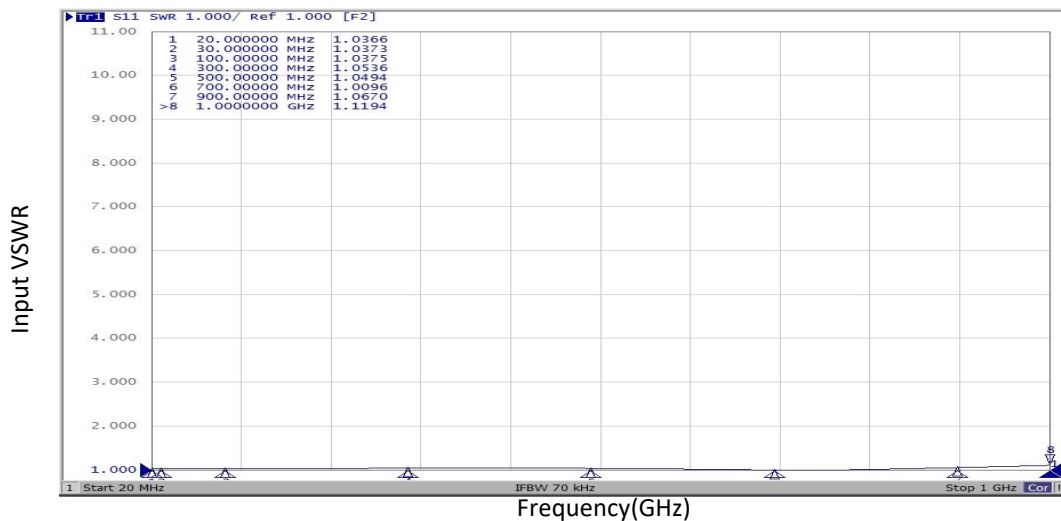
PIN1	PIN2	PIN3	PIN4
Input	Reflected Coupled	Transmission	Forward Coupled
Transmission	Forward Coupled	Input	Reflected Coupled

Typical Performance Data

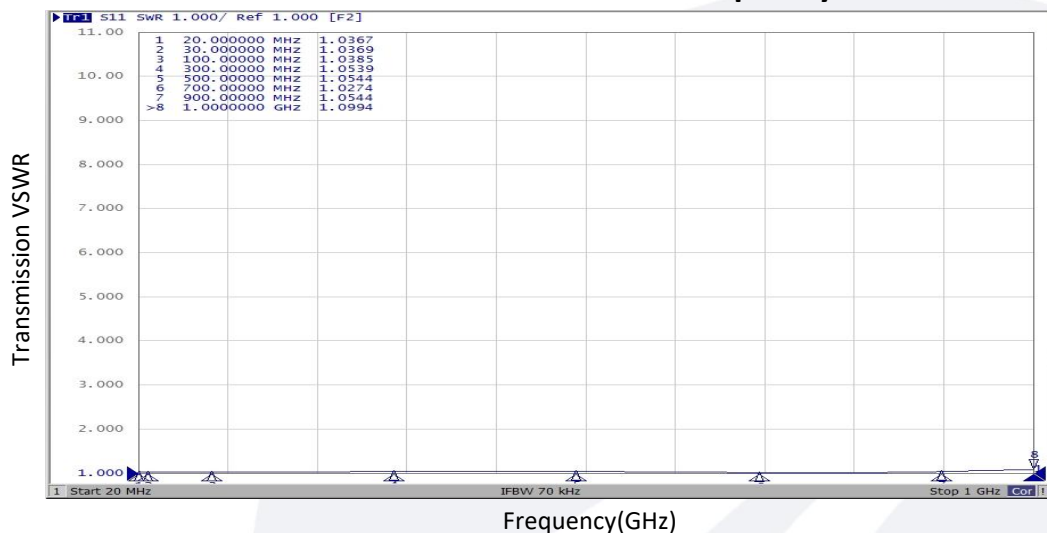
Frequency		MHz	20	30	100	300	500	700	900	1000
Coupling		dB	-50.52	-19.39	-50.18	-50.25	-50.00	-49.92	-49.75	-50.46
Insertion Loss		dB	-0.0002	-0.0002	-0.0002	-0.03	-0.07	-0.13	-0.21	-0.29
Directivity		dB	27.06	30.09	28.56	27.55	25.39	24.34	20.60	21.39
VSWR	Input	/	1.04	1.04	1.04	1.05	1.05	1.01	1.07	1.12
	Transmission	/	1.04	1.04	1.04	1.05	1.05	1.03	1.05	1.10

Typical Performance Data:

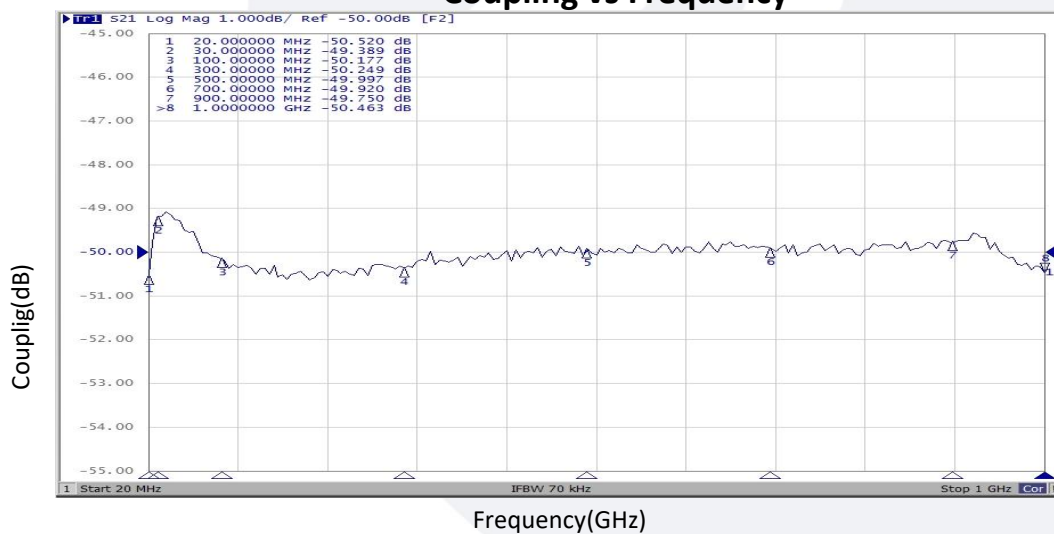
Input VSWR vs Frequency



Transmission VSWR vs Frequency

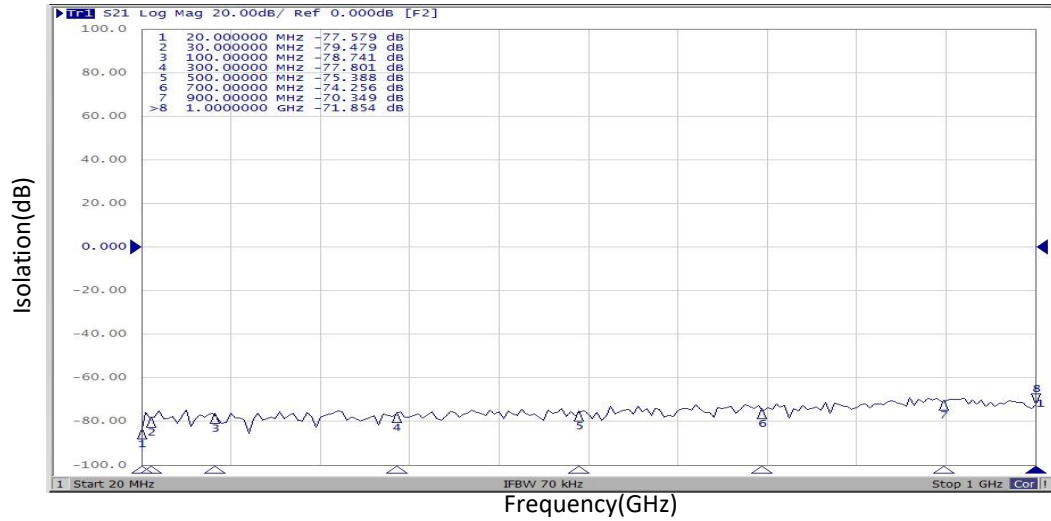


Coupling vs Frequency



Typical Performance Data:

Isolation vs Frequency



Insertion Loss vs Frequency

