

Part No.: TDC-009045-30N-200-SMD

30.5dB Directional Coupler 0.09-0.45GHz

Electrical:

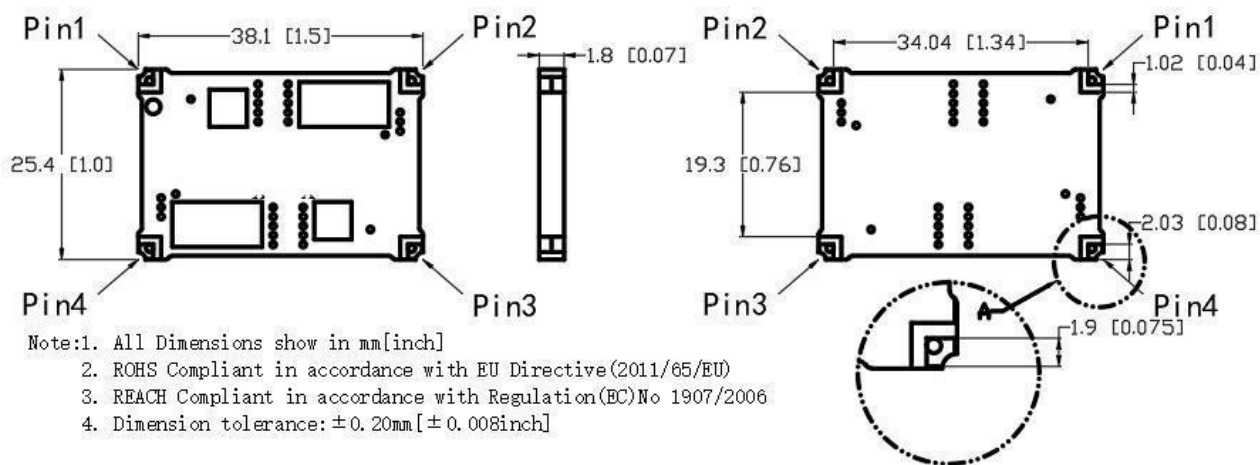
Frequency Range:	90-450MHz
Coupling :	$30.5 \pm 1.0\text{dB}$
Insertion Loss:	0.35dB Max
VSWR:	1.10:1 Max
Directivity:	30.0dB Min
Power Handling:	200 Watt
Impedance:	50 OHMS

Mechanical:

Temperature Range:	-55° C - +105° C
Size:	38.1mm*25.4mm
Thickness:	1.8mm
Relative Humidity:	0 ~ 90%

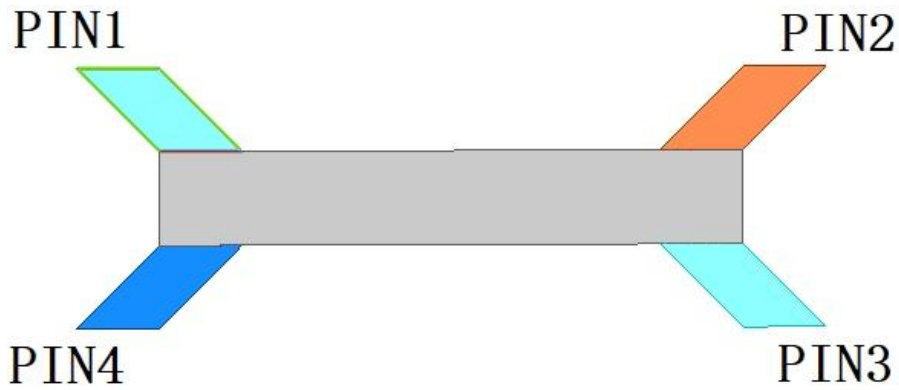
Outline Drawing:

Unit: mm



Port Configuration Table:

Hybrid Coupler Pin Configuration



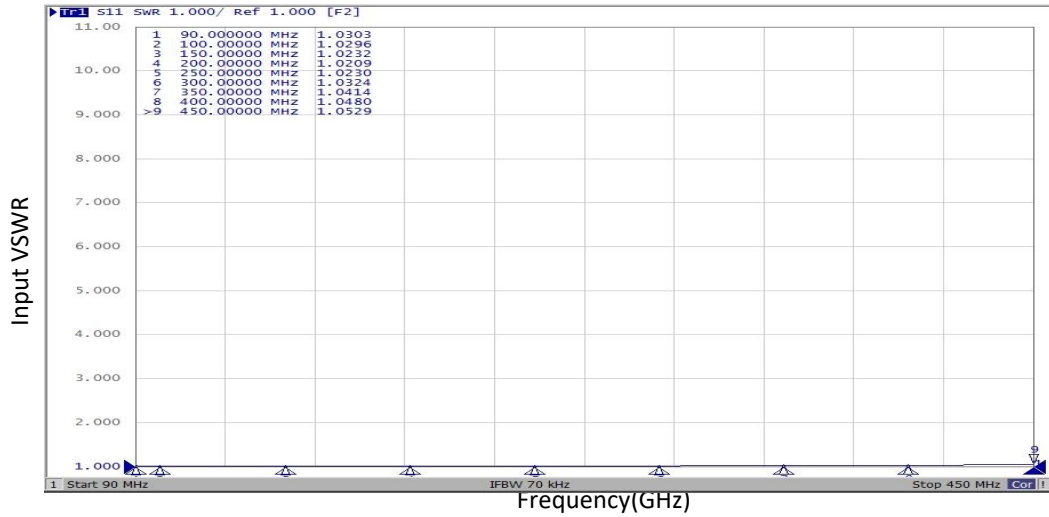
PIN1	PIN2	PIN3	PIN4
Input	Reflected Coupled	Transmission	Forward Coupled
Transmission	Forward Coupled	Input	Reflected Coupled

Typical Performance Data

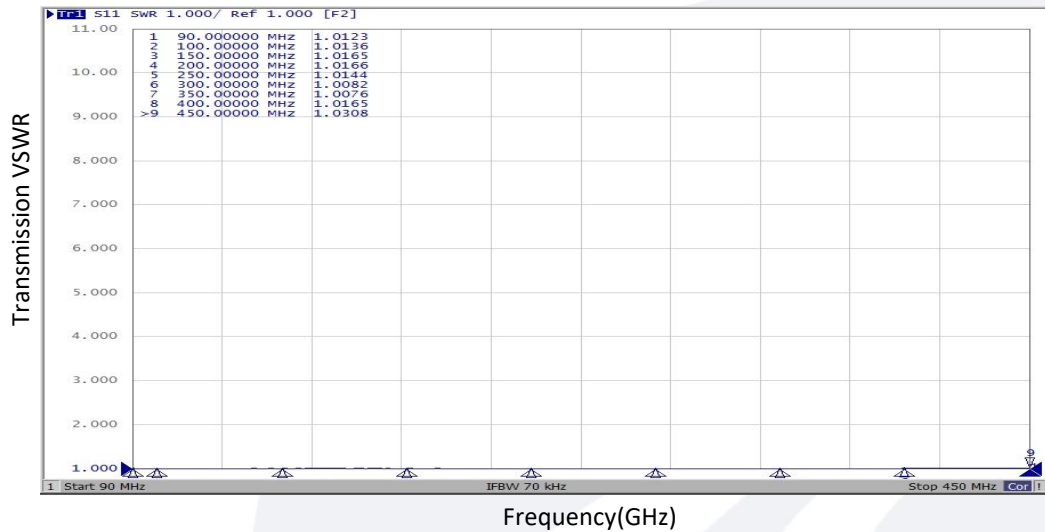
Frequency	MHz	90	100	150	200	250	300	350	400	450
Coupling	dB	-31.47	-31.05	-30.10	-29.94	-30.05	-30.09	-30.21	-30.38	-30.40
Insertion Loss	dB	-0.031	-0.036	-0.065	-0.09	-0.13	-0.18	-0.21	-0.27	-0.34
Directivity	dB	-36.09	-35.17	-35.76	-38.19	-43.13	-61.58	-43.32	-37.42	-33.69
VSWR	Input	/	1.03	1.03	1.02	1.02	1.02	1.03	1.04	1.05
	Transmission	/	1.01	1.01	1.02	1.02	1.01	1.01	1.01	1.02

Typical Performance Data:

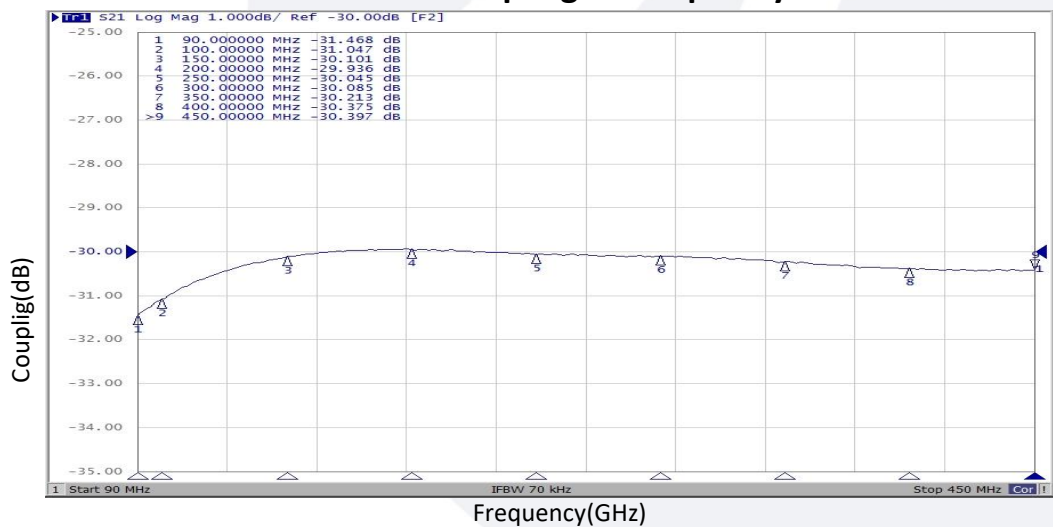
Input VSWR vs Frequency



Transmission VSWR vs Frequency



Coupling vs Frequency



Typical Performance Data:

Isolation vs Frequency



Insertion Loss vs Frequency

