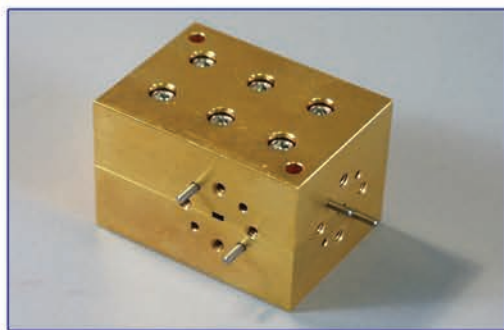


565 Series Cross Guide Directional Couplers

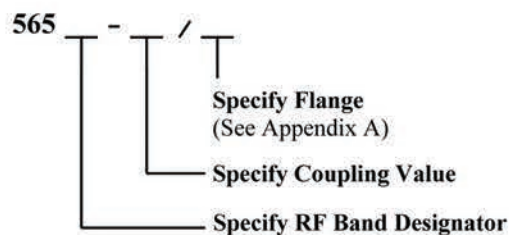
MI-WAVE
Millimeter Wave Products Inc.



Features

- Low VSWR
- High Isolation
- High Directivity
- Rugged Construction
- Broadband Operation

Ordering Information

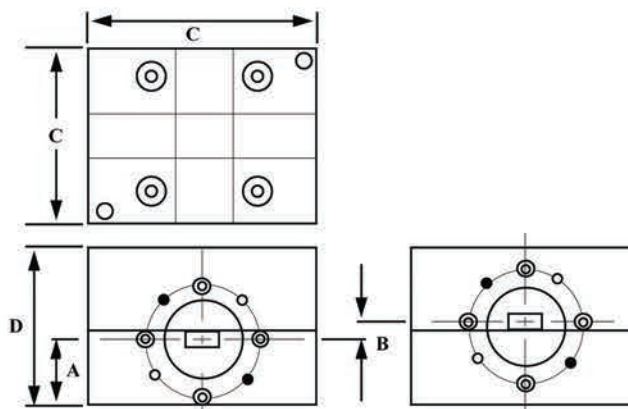


Description

Mi-Wave's 565 series cross guide couplers are similar in construction to the 564 series cross guide couplers. The units consist of two waveguides at right angles to each other, joined by small coupling slots whose size, location, and orientation determine the coupling and directivity of the unit. The 565 series couplers are unidirectional because one arm is internally terminated with a matched load.

Applications

The 565 series cross guide directional couplers provide an efficient means for sampling power or injecting a signal into a waveguide transmission line.



Dimensional Specifications

Model No	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
565K	.568	14.4	0.18	4.6	1.62	41.1	1.31	33.3
565A	.580	14.7	0.15	3.8	1.62	41.1	1.31	33.3
565B	.594	15.1	0.12	3.0	1.62	41.1	1.31	33.3
565U	.603	15.3	0.10	2.5	1.62	41.1	1.31	33.3
565V	.588	14.9	0.08	2.01	1.25	31.8	1.25	31.8
565E	.595	15.1	0.07	1.8	1.25	31.8	1.25	31.8
565W	.600	15.2	0.05	1.3	1.25	31.8	1.25	31.8
565F	.600	15.2	0.05	1.3	1.25	31.8	1.25	31.8

Technical Specifications (typical)

Model Number	565K	565A	565B	565U	565V	565E	565W	565F
Frequency Band (GHz)	18.0-26.5	26.5-40.0	33.0-50.0	40.0-60.0	50.0-75.0	60.0-90.0	75.0-110.0	90.0-140.0
Standard Coupling Values (dB) Nom.	16, 20, 30, 40, 50							
Directivity (dB) Typical	15	15	15	15	10	10	10	10
VSWR Max.	1.15	1.15	1.15	1.15	1.20	1.20	1.20	1.20
Weight (oz)	3.0	3.0	3.0	3.0	9.0	8.0	8.0	7.0

1. Any coupling values are available upon request.

2. Nominal ± 2.0 dB coupling variation over the waveguide band when set for coupling value at the band center.