

566 Series Cross Guide Directional Couplers

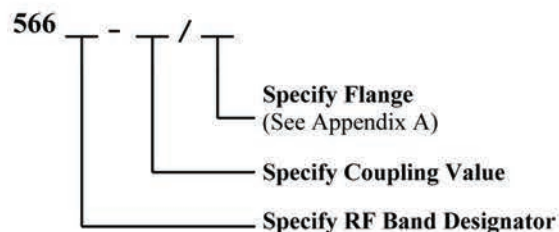
MI-WAVE
Millimeter Wave Products Inc.



Features

- Low Cost
- Low VSWR
- Four-Port Device
- Rugged Construction
- Broadband Operation

Ordering Information

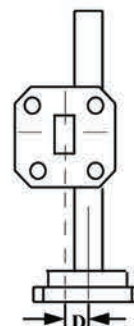
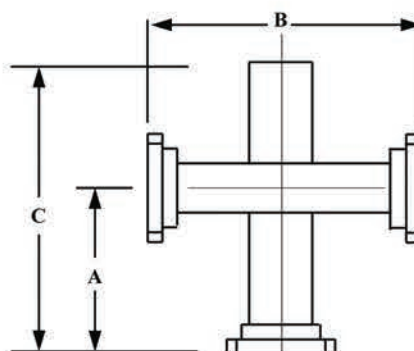


Description

Mi-Wave's 566 series cross guide coupler consists 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. All ports are available for sampling or injecting energy and are clearly marked to indicate the coupling direction.

Applications

The 566 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
566K	1.00	25.4	2.00	50.8	2.00	50.8	.187	4.74
566A	.75	.19	1.50	38.1	1.50	38.1	.161	4.09
566B	.75	.19	1.50	38.1	1.50	38.1	.127	3.22
566U	.75	.19	1.50	38.1	1.50	38.1	.11	2.80
566V	.75	.19	1.50	38.1	1.50	38.1	.090	2.29
566E	.75	.19	1.50	38.1	1.50	38.1	.075	1.90
566W	.75	.19	1.50	38.1	1.50	38.1	.065	1.65

Other Waveguide Bands Available:

WR-90
WR-75
WR-62
WR-51
WR-34

Technical Specifications (typical)

Model Number	566K	566A	566B	566U	566V	566E	566W
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
Standard Coupling Values (dB) Nom.	16, 20, 30, 40, 50						
Directivity (dB) Typical	15	15	15	15	10	10	10
VSWR Max.	1.15	1.15	1.15	1.15	1.20	1.20	1.20
Weight (oz)	3.0	3.0	3.0	3.0	2.0	2.0	2.0

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.