

560 Series Broadband Directional Couplers

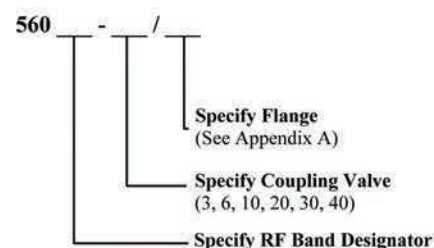
MI-WAVE
Millimeter Wave Products Inc.



Features

- Broadband
- Low VSWR
- E-plane design
- High Directivity
- Rugged Construction
- High Coupling Accuracy
- Calibrated Coupling Values
- Minimum Coupling Variation with Frequency

Ordering Information



Description

Mi-Wave's 560 series broadband directional couplers are broadwall E-plane multi-hole energy-coupling devices. The 560 series couplers are designed in 8 waveguide sizes from 12.4 to 110 GHz. Nominal couplings of 3, 6, 10, 20, 30, and 40 dB are offered to complement specific test set requirements.

Applications

The 560 series directional couplers provide an efficient and convenient means for sampling a finite quantity of power flowing in a transmission line or for injecting a desired signal into the line.

Other Waveguide Bands Available:

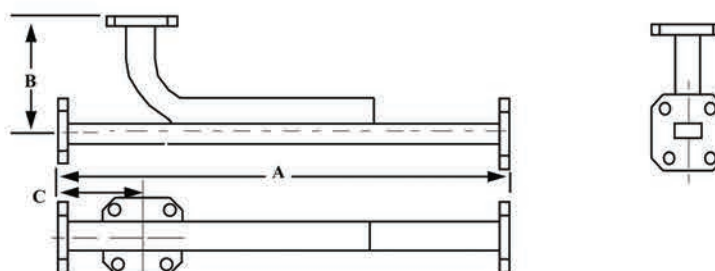
WR-90

WR-75

WR-62

WR-51

WR-34



Dimensional Specifications

Model No	A		B		C	
	in	mm	in	mm	in	mm
560K/10, 20, 30, 40	11.50	292.0	2.00	50.8	1.50	38.1
560K/3, 6 dB	12.75	323.9	2.00	50.8	1.50	38.1
560A/10, 20, 30, 40	9.62	244.0	1.75	44.5	1.38	35.1
560A/3, 6 dB	12.0	304.8	1.75	44.5	1.38	35.1
560B/10, 20, 30, 40	8.40	213.0	1.64	41.7	1.30	33.0
560B/3, 6 dB	10.25	259.1	1.64	41.7	1.30	33.0
560U/10, 20, 30, 40	7.38	187.4	1.38	35.1	1.12	28.5
560U/3, 6 dB	9.12	231.6	1.38	35.1	1.12	28.5
560V/10, 20, 30, 40	6.25	159.0	1.13	28.6	0.88	22.4
560V/3, 6 dB	7.25	184.1	1.13	28.7	0.88	22.4
560E/10, 20, 30, 40	5.50	140.0	1.13	28.5	0.88	22.4
560E/3, 6 dB	6.62	168.1	1.13	28.7	0.88	22.4
560W/10, 20, 30, 40	4.50	114.0	1.00	25.4	0.81	20.6
560W/3, 6 dB	5.50	139.7	1.00	25.4	0.81	20.6

Technical Specifications (typical)

Model Number	560K	560A	560B	560U	560V	560E	560W
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
Coupling (dB)	3, 6, 10, 20, 30, 40						
Coupling Variation (dB)	± 0.6	± 0.6	± 0.6	± 0.8	± 1.0	± 1.0	± 1.0
Coupling Accuracy (dB)	± 1.0	± 1.0	± 1.0	± 1.2	± 1.5	± 1.5	± 1.5
Directivity (dB) Typical	40	40	40	40	40	40	40
Main Line VSWR	1.05	1.05	1.05	1.10	1.10	1.10	1.10
Auxiliary Line VSWR	1.12	1.12	1.12	1.15	1.15	1.15	1.17