

## 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, 40 and 50 dB are offered to complement specific test set requirements.

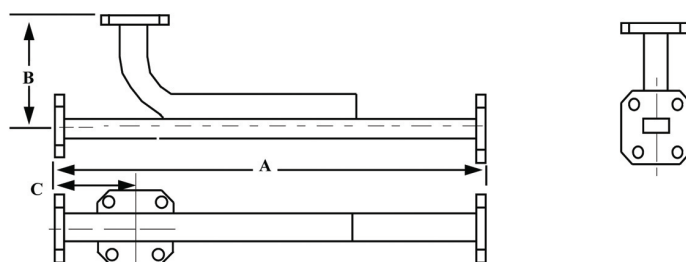
## Applications

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.

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



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, 30, 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

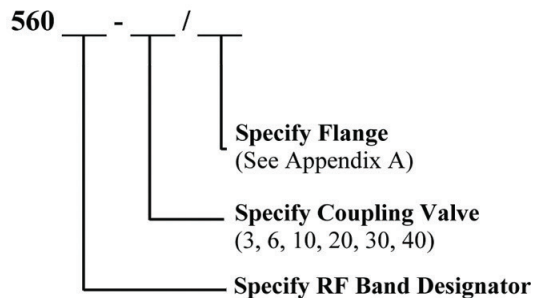


### OTHER WAVEGUIDE BANDS AVAILABLE:

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

Technical Specifications (typical)							
Model No.	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)	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
Coupling Accuracy (dB) (at center freq)	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0
Directivity (dB) Typical	40	40	40	40	40	40	40
Main Line VSWR (typ)	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

## Ordering Information



\*Coupling fluctuates +/- 1dB or +/- 5% whichever is greater