

# 561 Series Broadband Directional Couplers



## Features

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

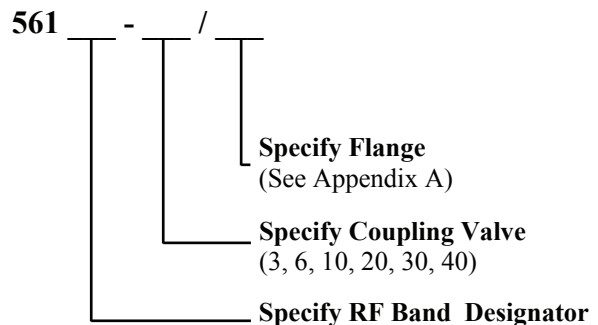
## Description 561 Series Couplers

**Mi-Wave's** 561 series broadband directional couplers are broadwall multi-hole energy-coupling devices. The 561 series devices are available in various waveguide sizes ranging in frequency from 18.0 to 220 GHz. Nominal couplings of 3 dB, 6 dB, 10 dB, 20 dB, 30 dB, and 40 dB are offered to complement specific test set requirements.

## Applications

The 561 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.

## Ordering Information



## Mi-Wave

Millimeter Wave Products Inc.

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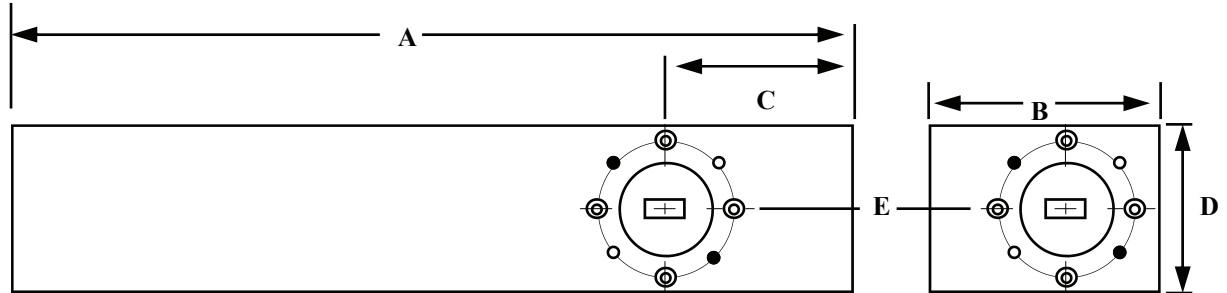
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# 561 Series Broadband Directional Couplers

## Technical Specifications

Model Number	561 A	561 B	561U	561V	561E	561W	561F	561D	561G	
Frequency Band (GHz)	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	110.0-170.0	140.0-220.0	
Coupling (dB)						3, 6, 10, 20, 30, 40				
Coupling Variation (dB)	± .06	± .06	± .08	± 1.0	± 1.0	± 1.0	± 1.5	± 1.5	± 1.5	
Coupling Accuracy (dB)	± 1.0	± 1.0	± 1.0	± 1.5	± 1.5	± 1.5	± 2.0	± 2.0	± 2.0	
Directivity (dB) Typical	35	35	35	35	35	35	25	25	25	
Main Line VSWR	1.05	1.05	1.05	1.10	1.10	1.10	1.15	1.15	1.15	
Auxiliary Line VSWR	1.12	1.12	1.12	1.15	1.15	1.17	1.20	1.20	1.20	



## Dimensional Specifications

Model Number	A		B		C		D		E	
	in	mm	in	mm	in	mm	in	mm	in	mm
561A	9.5	241.3	1.50	38.1	1.50	38.1	1.30	33.0	0.65	16.5
561B	8.0	203.2	1.30	33.0	1.50	38.1	1.30	33.0	0.65	16.5
561U	7.0	177.8	1.30	33.0	1.30	33.0	1.30	33.0	0.65	16.5
561 V	6.0	152.4	1.30	33.0	1.25	31.8	1.00	25.4	0.50	12.7
561E	5.0	127.0	1.10	27.9	1.00	25.4	1.00	25.4	0.50	12.7
561W	4.0	101.6	1.10	27.9	0.80	20.32	1.00	25.4	0.50	12.7
561F	2.88	73.15	1.10	27.9	0.80	20.32	1.00	25.4	0.50	12.7
561D	2.88	73.15	1.10	27.9	0.80	20.32	1.00	25.4	0.50	12.7
561 G	2.88	73.15	1.10	27.9	0.80	20.32	1.00	25.4	0.50	12.7

**Mi-Wave**

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