

Description

Mi-Wave's 561 Series Broadband Directional Couplers are broadband multihole energy-coupling devices. The 561 Series devices are available in various waveguide sizes ranging in frequency from 18.0 to 500 GHz.

Nominal couplings of 3, 6, 10, 20, 30, 40 and 50 dB are offered to complement specific test set requirements.

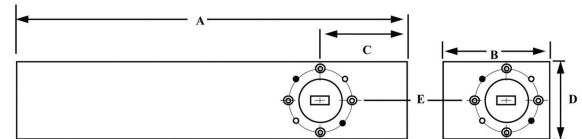
- *Broadband*
- *Low VSWR*
- *High Directivity*
- *Rugged Construction*
- *High Coupling Accuracy*
- *Calibrated Coupling Values*
- *Minimum Coupling Variation with Frequency*

Applications

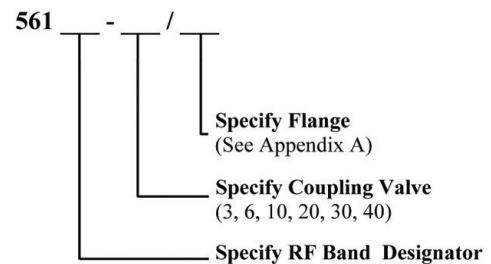
The 561 Series Directional Couplers provide an efficient and convenient means for sampling a finite quantity of power flowing in a transmission line or for injecting a desired signal into the line.

Dimensional Specifications

Model No.	A		B		C		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
561A	6.21	157.7	0.93	23.6			0.69	17.5	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
561V	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
561G	2.88	73.15	1.10	27.9	0.80	20.32	1.00	25.4	0.50	12.7



Ordering Information



Technical Specifications (typical)

Model No.	561A	561B	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)	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.0	± 1.5	± 1.5	± 1.5
Coupling Accuracy (dB) (at center frequency)	± 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

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