567 Series Dual-Directional Couplers

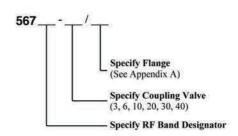




Features

- · High Directivity
- Accurate Coupling
- · Full Waveguide Bandwidth

Ordering Information



Description

Mi-Wave's 567 series dual directional couplers are broadband, broadwall components with a multi-hole directivity. The 567 series couplers are available in 3, 6, 10, 20, 30, and 40 dB coupling values for standard waveguide bands from 26.5 to 110.0 GHz.

Applications

The 567 series dual directional couplers are used in applications that require precise sampling of both incident and reflected energy. The 3 dB couplers are especially useful in balanced mixer work where broadband power division of RF and LO signals is required to supply both sides of a balanced mixer unit. The 3 dB bidirectional couplers can provide full bandwidth power division.

Other Waveguide Bands Available:

WR-90

WR-75

WR-62

WR-51 WR-34

Dimensional Specifications

Model No	Α		В		С		D	
	in	mm	in	mm	in	mm	in	mm
567A/10, 20, 30, 40	9.62	244.0	1.75	445	1.38	35.1	.16	4.06
567A/3, 6 dB	12.0	304.8	1.75	445	1.38	35.1	.16	4.06
567B/10, 20, 30, 40	8.40	213.0	1.64	41.7	1.30	33.0	.13	3.30
567B/3, 6 dB	10.25	259.1	1.64	41.7	1.30	33.0	.13	3.30
567U/10, 20, 30, 40	7.38	187.4	1.38	35.1	1.12	28.5	.11	2.80
567U/3, 6 dB	9.12	231.6	1.38	35.1	1.12	28.5	.11	2.80
567V/10, 20, 30, 40	6.25	159.0	1.13	28.6	0.88	22.4	.08	2.03
567V/3, 6 dB	7.25	184.1	1.13	28.7	0.88	22.4	.08	2.03
567E/10, 20, 30, 40	5.50	140.0	1.13	28.5	0.88	22.4	.07	1.78
567E/3, 6 dB	6.62	168.1	1.13	28.7	0.88	22.4	.07	1.78
567W/10, 20, 30, 40	4.50	114.0	1.00	25.4	0.81	20.6	.06	1.52
567W/3, 6 dB	5.50	139.7	1.00	25.4	0.81	20.6	.06	1.52

Technical Specifications (typical)

Model Number	567A	567B	567U	567V	567E	567W			
Frequency	26.5-	33.0-	40.0-	50.0-	60.0-	75.0-			
Band (GHz)	40.0	50.0	60.0	75.0	90.0	110.0			
Coupling (dB)	3, 6, 10, 20, 30, 40								
Coupling Variation (dB)	± 0.7	± 0.7	± 0.8	± 1.0	± 1.0	± 1.0			
Coupling Accuracy (dB)	± 1.0	± 1.0	± 1.2	± 1.5	± 1.5	± 1.5			
Directivity (dB) Typical	30	30	30	30	30	30			
Main Line VSWR	1.05	1.05	1.10	1.10	1.10	1.10			
Auxiliary Line VSWR	1.15	1.15	1.20	1.20	1.20	1.20			
Weight (oz)	6.0	5.0	4.0	3.0	2.5	2.0			