

Directional Couplers Mini Octave Bandwidth

Rev. V4

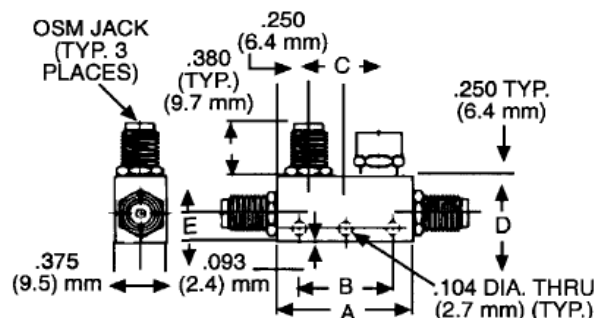
Features

- Smallest and Lightest Couplers Available
- 0.5 through 18 GHz, including Wideband Units
- High Directivity - Low VSWR
- Meets MIL-E-5400 Environments

Description

These miniature couplers are designed to provide sampling of the RF Power propagating in one direction on a transmission line.

Outline Drawing¹



1. All dimensions are ± 0.020 , except mounting hole diameters (± 0.005) and mounting hole location (± 0.010).

Mechanical Specifications

Case Style	A Inch (mm)	B Inch (mm)	C Inch (mm)	D Inch (mm)	E Inch (mm)	Weight oz	Weight g
1	1.00 (25.4)	N/A	0.50 (12.7)	0.55 (13.9)	0.22 (5.6)	0.62	17.6
2	1.00 (25.4)	N/A	0.50 (12.7)	0.50 (12.7)	0.22 (5.6)	0.60	17.0
3	1.16 (29.4)	0.34 (8.7)	0.66 (16.7)	0.50 (12.7)	0.22 (5.6)	0.64	18.2
4	1.16 (29.4)	0.34 (8.7)	0.66 (16.7)	0.55 (13.9)	0.22 (5.6)	0.67	19.0
5	1.78 (45.2)	0.94 (23.8)	1.28 (32.5)	0.50 (12.7)	0.22 (5.6)	0.82	23.2
6	1.78 (45.2)	0.94 (23.8)	1.28 (32.5)	0.55 (13.9)	0.22 (5.6)	0.87	23.3
7 ²	3.00 (76.2)	1.00 (25.4)	2.50 (64.5)	0.75 (19.1)	0.31 (7.9)	1.50	43.0
8	1.00 (25.4)	N/A	0.50 (12.7)	0.63 (15.9)	0.22 (5.6)	0.67	19.0

2. Case Style 7 has four mounting holes located symmetrically to the two shown dotted in figure.

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Specifications

Part #	Case Style	Freq. Range	Coupling (Include Freq. Sens.)	Freq. Sens.	Insertion Loss max.	Direct. min.	VSWR max.		Input Power		
		(GHz)	(dB)	(dB)	(dB)	(dB)	Prim Line	Sec Line	Avg. In. (W)	Avg. Refl. (W)	Pk. (kW)
2020-6605-10	5	1.0-2.0	10 ± 1.0	±0.75	0.20	25	1.15	1.15	50	10	4
2020-6606-20	5		20 ± 1.0	±0.75	0.20	25	1.15	1.15	50	50	4
2020-6607-30	6		30 ± 1.0	±0.75	0.20	25	1.15	1.15	50	50	4
2020-6609-10	3	2.0-4.0	10 ± 1.0	±0.75	0.20	22	1.15	1.15	50	10	4
2020-6610-20	3		20 ± 1.0	±0.75	0.20	22	1.15	1.15	50	50	4
2020-6611-30	4		30 ± 1.0	±0.75	0.20	22	1.15	1.15	50	50	4
2020-6613-10	2	2.6-5.2	10 ± 1.0	±0.75	0.25	20	1.25	1.25	50	10	4
2020-6614-20	2		20 ± 1.0	±0.75	0.25	20	1.25	1.25	50	50	4
2020-6615-30	1		30 ± 1.0	±0.75	0.25	20	1.25	1.25	50	50	4
2020-6616-06	2	4.0-8.0	6 ± 0.75	±0.50	0.25	22	1.25	1.25	50	4	4
2020-6617-10	2		10 ± 0.75	±0.50	0.25	20	1.25	1.25	50	10	4
2020-6618-20	2		20 ± 0.75	±0.50	0.25	20	1.25	1.25	50	50	4
2020-6619-30	1		30 ± 0.75	±0.50	0.25	20	1.25	1.25	50	50	4
2020-6621-10	1	7.0-12.4	10 ± 0.75	±0.40	0.40	20	1.30	1.35	50	10	4
2020-6622-20	1		20 ± 0.75	±0.50	0.30	18	1.25	1.25	50	50	4
2020-6623-30	1		30 ± 1.0	±0.50	0.30	17	1.35	1.35	50	50	4
2020-6624-06	2	7.0-18.0	6 ± 1.0	±0.50	0.60	15	1.35	1.35	50	4	3
2020-6625-10	1		10 ± 1.0	±0.50	0.40	20	1.30	1.40	50	10	3
2020-6626-20	1		20 ± 1.0	±0.75	0.50	15 ¹	1.45	1.45	50	50	3
2020-6627-30	8		30 ± 1.0	±0.75	0.50	15 ¹	1.45	1.45	50	50	3
2020-6628-06	2	12.4-18.0	6 ± 0.75	±0.40	0.60	15	1.40	1.40	50	4	2
2020-6629-10	1		10 ± 0.75	±0.40	0.40	20	1.30	1.40	50	10	2
2020-6630-20	1		20 ± 0.75	±0.50	0.50	15	1.45	1.45	50	50	2
2020-6631-30	8		30 ± 0.75	±0.50	0.50	12	1.45	1.45	50	50	2

1. 12 dB from 12.4 to 18.0 GHz

Screening

Part #	MIL Dash #	MIL-C-15370/9 Part # ²
2020-6605-10 2020-6606-20 2020-6607-30	-200 -300 -400	2020-4015-10 2020-4015-20 2020-4015-30
2020-6609-10 2020-6610-20 2020-6611-30	-600 -700 -800	2020-4016-10 2020-4016-20 2020-4016-30
2020-6616-06 2020-6617-10 2020-6618-20	-900 -100 -110	2020-4017-06 2020-4017-10 2020-4017-20
2020-6621-10 2020-6622-20 2020-6623-30	-130 -140 -180	2020-4018-10 2020-4018-20 2020-4018-30
2020-6630-20	-17	2020-4114-20

2. Mil spec couplers are offered as commercial equivalents only.

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