2020-66x Series

Directional Couplers Mini
Octave Bandwidth

Rev. V4

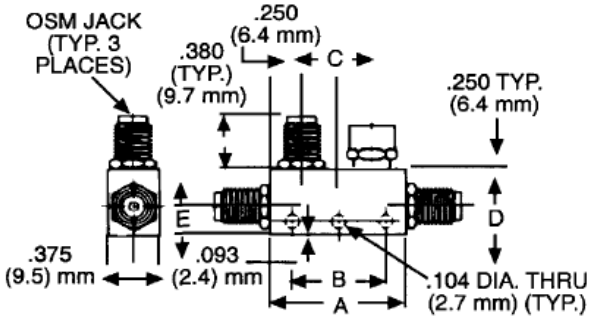
Features

- 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 Drawing[1]



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	-200	2020-4015-10
2020-6606-20	-300	2020-4015-20
2020-6607-30	-400	2020-4015-30
2020-6609-10	-600	2020-4016-10
2020-6610-20	-700	2020-4016-20
2020-6611-30	-800	2020-4016-30
2020-6616-06	-900	2020-4017-06
2020-6617-10	-100	2020-4017-10
2020-6618-20	-110	2020-4017-20
2020-6621-10	-130	2020-4018-10
2020-6622-20	-140	2020-4018-20
2020-6623-30	-180	2020-4018-30
2020-6630-20	-17	2020-4114-20

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

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