

# Directional Couplers Mini, Octave Bandwidth

Rev. V3

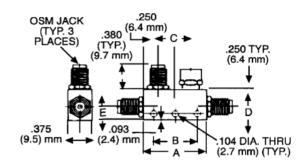
#### **Features**

- 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**



Note: All dimensions are  $\pm$  .020, except mounting hole diameters ( $\pm$  .005) and mounting hole location ( $\pm$  .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*	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

<sup>\*</sup> Case Style 7 has four mounting holes located symmetrically to the two shown dotted in figure.

# 2020 Series



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## **Specifications**

Part Num- ber	Case Style	Freq. Range (GHz)	Coupling (Include. Freq. Sens. (dB)	Freq. Sens (dB)	Insertion Loss Max (dB)	Direct. Min. (dB)	VSWR Max Prim Line	VSWR Max Sec Line	Power (Input) Avg. In. (w)	Power (Input) Avg. Refl. (W)	Power (Input) Pk. (kW)	MIL Dash No.	M/A-COM MIL-C- 15370/9 P/N <sup>2</sup>
2020-6600-06 2020-6601-10 2020-6602-20 2020-6603-30	7 7 7 7	0.5-1.0	6 ± 1.0 10 ± 1.0 20 ± 1.0 30 ± 1.0	±0.60 ±0.75 ±0.75 ±0.75	0.15 0.15 0.15 0.15	25 25 25 25	1.10 1.10 1.10 1.10	1.10 1.10 1.10 1.10	50 50 50 50	4 10 50 50	4 4 4 4		
2020-6604-06 2020-6605-10 2020-6606-20 2020-6607-30	5 5 5 6	1.0-2.0	6 ± 1.0 10 ± 1.0 20 ± 1.0 30 ± 1.0	±0.60 ±0.75 ±0.75 ±0.75	0.20 0.20 0.20 0.20 0.20	25 25 25 25 25	1.15 1.15 1.15 1.15	1.15 1.15 1.15 1.15	50 50 50 50 50	4 10 50 50	4 4 4 4	-100 -200 -300 -400	2020-4015-06 2020-4015-10 2020-4015-20 2020-4015-30
2020-6608-06 2020-6609-10 2020-6610-20 2020-6611-30	3 3 3 4	2.0-4.0	6 ± 1.0 10 ± 1.0 20 ± 1.0 30 ± 1.0	±0.60 ±0.75 ±0.75 ±0.75	0.20 0.20 0.20 0.20 0.20	22 22 22 22 22	1.15 1.15 1.15 1.15	1.15 1.15 1.15 1.15	50 50 50 50	4 10 50 50	4 4 4 4	-500 -600 -700 -800	2020-4016-06 2020-4016-10 2020-4016-20 2020-4016-30
2020-6612-06 2020-6613-10 2020-6614-20 2020-6615-30	2 2 2 1	2.6-5.2	6 ± 1.0 10 ± 1.0 20 ± 1.0 30 ± 1.0	±0.60 ±0.75 ±0.75 ±0.75	0.25 0.25 0.25 0.25	20 20 20 20 20	1.25 1.25 1.25 1.25	1.25 1.25 1.25 1.25	50 50 50 50	4 10 50 50	4 4 4 4		  -  -
2020-6616-06 2020-6617-10 2020-6618-20 2020-6619-30	2 2 2 1	4.0-8.0	6 ± 0.75 10 ± 0.75 20 ± 0.75 30 ± 0.75	±0.50 ±0.50 ±0.50 ±0.50	0.25 0.25 0.25 0.25	22 20 20 20 20	1.25 1.25 1.25 1.25	1.25 1.25 1.25 1.25	50 50 50 50	4 10 50 50	4 4 4 4	-900 -100 -110 —	2020-4017-06 2020-4017-10 2020-4017-20
2020-6620-06 2020-6621-10 2020-6622-20 2020-6623-30	2 1 1 1	7.0-12.4	6 ± 1.0 10 ± 0.75 20 ± 0.75 30 ± 1.0	±0.50 ±0.40 ±0.50 ±0.50	0.40 0.40 0.30 0.30	15 20 18 17	1.35 1.30 1.25 1.35	1.35 1.35 1.25 1.35	50 50 50 50	4 10 50 50	4 4 4 4	-120 -130 -140 -180	2020-4018-06 2020-4018-10 2020-4018-20 2020-4018-30
2020-6624-06 2020-6625-10 2020-6626-20 2020-6627-30	2 1 1 8	7.0-18.0	6 ± 1.0 10 ± 1.0 20 ± 1.0 30 ± 1.0	±0.50 ±0.50 ±0.75 ±0.75	0.60 0.40 0.50 0.50	15 20 15 <sup>1</sup> 15 <sup>1</sup>	1.35 1.30 1.45 1.45	1.35 1.40 1.45 1.45	50 50 50 50	4 10 50 50	3 3 3 3		
2020-6628-06 2020-6629-10 2020-6630-20 2020-6631-30	2 1 1 8	12.4-18.0	6 ± 0.75 10 ± 0.75 20 ± 0.75 30 ± 0.75	±0.40 ±0.40 ±0.50 ±0.50	0.60 0.40 0.50 0.50	15 20 15 12	1.40 1.30 1.45 1.45	1.40 1.40 1.45 1.45	50 50 50 50	4 10 50 50	2 2 2 2	_ _ -17 _	  2020-4114-20 

<sup>1. 12</sup> dB from 12.4 to 18.0 GHz 2. Mil spec couplers are offered as commercial equivalents only.

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