

Directional Couplers Mini, Octave Bandwidth

Rev. V3

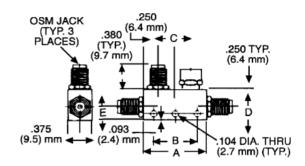
Features

- 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 |

^{*} Case Style 7 has four mounting holes located symmetrically to the two shown dotted in figure.

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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 ² |
|--|------------------|-------------------------|---|----------------------------------|--------------------------------------|--|------------------------------|------------------------------|-------------------------------------|--|---------------------------------|------------------------------|--|
| 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 ¹ 15 ¹ | 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 |

^{1. 12} dB from 12.4 to 18.0 GHz 2. Mil spec couplers are offered as commercial equivalents only.

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