

Directional Couplers

Mini, Octave Bandwidth

V 3.00

2020 Series

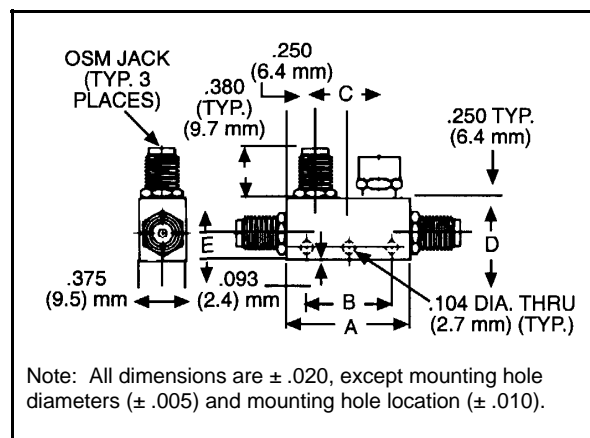
Features

- 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



Mechanical Specifications

| Case Style | A Inch (mm) | B Inch (mm) | C Inch (mm) | D Inch (mm) | E Inch (mm) | Weight | |
|------------|----------------|----------------|----------------|----------------|----------------|--------|------|
| | | | | | | oz. | 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.

Specifications

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

2. MIL spec parts are offered after a First Article test is performed and approved per procedure GFA0067 in accordance with MIL-C-15370 Rev G. Consult Field Sales for pricing.

Specifications subject to change without notice.

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