

Air Dielectric Directional Couplers

Low Loss, Octave Bandwidth

2023 Series

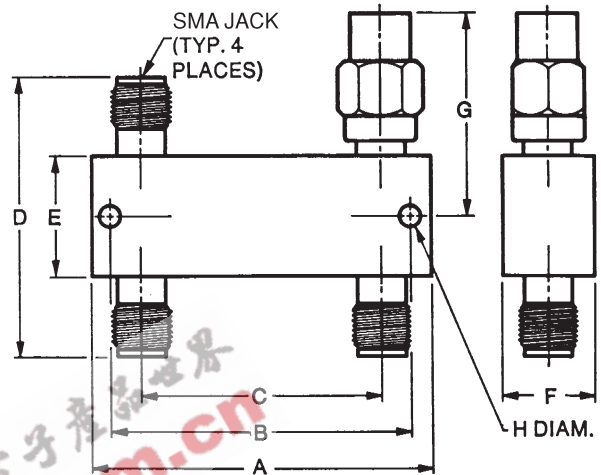
V2.00

Features

- Air Dielectric for Low Loss
- Frequency Range: 1.0 to 18 GHz
- Octave Bandwidths
- Meets MIL-E-5400 and MIL-E-16400 Environments

Description

These directional couplers feature compact packaging and four-port construction. This combination permits flexibility in system designs. They are intended for test and measurement setups as well as for system use. Temperature range is -54° to +110°C. These units incorporate three miniature, low VSWR SMA jack connectors. Isolated port is terminated with 1/2 watt, 50 ohm load.



NOTE: All dimensions are $\pm .020$, except mounting hole diameters ($\pm .005$) and mounting hole location ($\pm .010$).

Mechanical Specifications

| Case Style | A | B | C | D | E | F | G | H | Weight | |
|------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|--------------|--------|----|
| | Inch (mm) | Inch (mm) | Inch (mm) | Inch (mm) | Inch (mm) | Inch (mm) | Inch (mm) | Inch (mm) | oz. | g |
| 1 | 2.55 (64.8) | 2.39 (60.8) | 1.97 (50.1) | 1.16 (29.4) | 0.50 (12.7) | 0.38 (9.7) | 0.91 (23.2) | 0.093 (2.36) | 1.90 | 54 |
| 2 | 1.69 (42.7) | 1.52 (38.7) | 1.11 (28.2) | 1.16 (29.4) | 0.50 (12.7) | 0.38 (9.7) | 0.91 (23.2) | 0.093 (2.36) | 1.10 | 31 |
| 3 | 1.41 (35.6) | 1.24 (31.5) | 0.82 (20.8) | 1.16 (29.4) | 0.50 (12.7) | 0.38 (9.7) | 0.91 (23.2) | 0.093 (2.36) | 1.07 | 31 |
| 4 | 1.19 (30.0) | 1.02 (26.0) | 0.60 (15.2) | 1.16 (29.4) | 0.50 (12.7) | 0.38 (9.7) | 0.91 (23.2) | 0.093 (2.36) | 0.98 | 28 |
| 5 | 1.08 (27.4) | 0.92 (23.4) | 0.50 (12.7) | 1.28 (32.6) | 0.63 (15.9) | 0.38 (9.7) | 0.97 (24.6) | 0.093 (2.36) | 1.01 | 30 |

Specifications

| Part No. | Case Style | Frequency Range (GHz) | Coupling (Includ. Freq. Sens.) (dB) | Freq. Sens. (dB) | Insert. Loss Max. (dB) | Direct. Min. (dB) | VSWR Max. | Power Avg. (W) | Pk (kW) | M/A-COM MIL-C-15370/10* Commercial Equivalent Part No. |
|--------------|------------|-----------------------|-------------------------------------|------------------|------------------------|-------------------|-----------|----------------|---------|--|
| 2023-6121-06 | 1 | 1.0 - 2.0 | 6 ±1.0 | ±0.50 | 0.20 | 20 | 1.20 | 2 | 2 | 2023-4011-06 |
| 2023-6122-10 | 1 | | 10 ±1.0 | ±0.75 | 0.20 | 20 | 1.20 | 5 | 2 | 2023-4012-10 |
| 2023-6123-20 | 1 | | 20 ±1.0 | ±1.00 | 0.20 | 20 | 1.20 | 50 | 2 | 2023-4013-20 |
| 2023-6124-06 | 2 | 2.0 - 4.0 | 6 ±1.0 | ±0.50 | 0.20 | 20 | 1.20 | 2 | 2 | 2023-4014-06 |
| 2023-6125-10 | 2 | | 10 ±1.0 | ±0.75 | 0.20 | 20 | 1.20 | 5 | 2 | — |
| 2023-6126-20 | 2 | | 20 ±1.0 | ±1.00 | 0.20 | 20 | 1.20 | 50 | 2 | — |
| 2023-6127-06 | 3 | 2.6 - 5.2 | 6 ±1.0 | ±0.60 | 0.20 | 18 | 1.25 | 2 | 2 | — |
| 2023-6128-10 | 3 | | 10 ±1.0 | ±0.75 | 0.20 | 18 | 1.25 | 5 | 2 | — |
| 2023-6129-20 | 3 | | 20 ±1.0 | ±1.00 | 0.20 | 18 | 1.25 | 50 | 2 | — |
| 2023-6130-06 | 4 | 4.0 - 8.0 | 6 ±1.0 | ±0.60 | 0.20 | 18 | 1.25 | 2 | 2 | 2023-4015-10 |
| 2023-6131-10 | 4 | | 10 ±1.0 | ±0.75 | 0.20 | 18 | 1.25 | 5 | 2 | — |
| 2023-6132-20 | 4 | | 20 ±1.0 | ±1.00 | 0.20 | 18 | 1.25 | 50 | 2 | — |
| 2023-6133-06 | 5 | 8.0 - 12.4 | 6 ±1.0 | ±0.50 | 0.25 | 15 | 1.30 | 2 | 2 | — |
| 2023-6134-10 | 5 | | 10 ±1.0 | ±0.75 | 0.25 | 15 | 1.30 | 5 | 2 | 2023-4016-10 |
| 2023-6135-20 | 5 | | 20 ±1.0 | ±1.00 | 0.25 | 15 | 1.30 | 50 | 2 | 2023-4017-20 |
| 2023-6136-06 | 5 | 12.4 - 18.0 | 6 ±1.0 | ±0.60 | 0.25 | 12 | 1.35 | 2 | 2 | 2023-4085-06 |
| 2023-6137-10 | 5 | | 10 ±1.0 | ±0.75 | 0.25 | 12 | 1.35 | 5 | 2 | — |
| 2023-6138-20 | 5 | | 20 ±1.0 | ±1.00 | 0.25 | 12 | 1.35 | 50 | 2 | — |