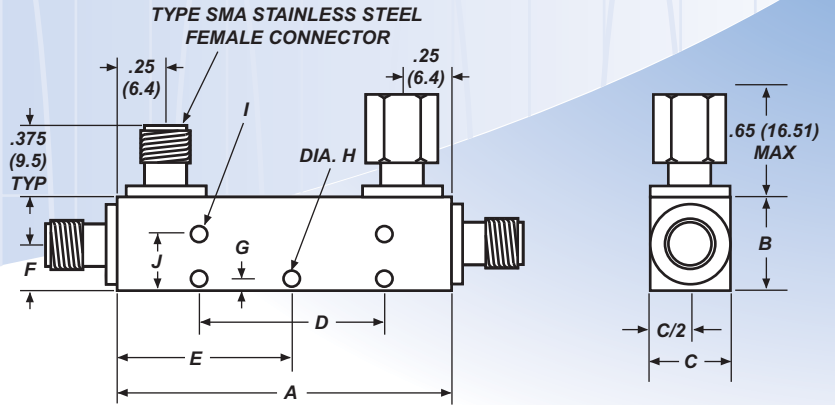


# Directional Couplers - Broadband

- 0.5 - 18.0 GHz
- Miniature Size
- High Directivity
- Low VSWR
- RF Shielded
- Robust Construction

| General Specifications |  |
|------------------------|--|
| Design                 | Stripline                              |
| Circuit                | PTFE Based                             |
| Housing                | Aluminium                              |
| Connectors             | SMA to MIL-C-39012<br>N & TNC Optional |
| Temperature            | -55 +105C                              |
| Finish                 | Paint                                  |



All dimensions are in inches (mm).

| FIG | A            | B           | C           | D           | E           | F          | G          | H          | I   | J          |
|-----|--------------|-------------|-------------|-------------|-------------|------------|------------|------------|-----|------------|
| 1   | 3.60 (91.5)  | 0.53 (13.5) | 0.38 (9.7)  | 2.60 (66.0) | N/A         | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 2   | 3.60 (91.5)  | 0.60 (15.2) | 0.38 (9.7)  | 2.60 (66.0) | N/A         | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 3   | 2.90 (73.7)  | 0.68 (17.3) | 0.38 (9.7)  | 2.00 (50.8) | N/A         | 0.34 (8.6) | 0.15 (3.8) | 0.15 (3.8) | N/A | N/A        |
| 4   | 2.90 (73.7)  | 0.60 (15.2) | 0.38 (9.7)  | 2.00 (50.8) | N/A         | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 5   | 1.78 (45.2)  | 0.68 (17.3) | 0.38 (9.7)  | 0.88 (22.4) | N/A         | 0.34 (8.6) | 0.15 (3.8) | 0.15 (3.8) | N/A | N/A        |
| 6   | 1.88 (47.8)  | 0.60 (15.2) | 0.38 (9.7)  | 1.00 (25.4) | N/A         | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 7   | 1.22 (31.0)  | 0.55 (14.0) | 0.38 (9.7)  | 0.38 (9.7)  | N/A         | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 8   | 1.22 (31.0)  | 0.60 (15.2) | 0.38 (9.7)  | 0.38 (9.7)  | N/A         | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 9   | 1.00 (25.4)  | 0.50 (12.7) | 0.38 (9.7)  | N/A         | 0.50 (12.7) | 0.22 (5.6) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 10  | 4.40 (111.8) | 0.60 (15.2) | 0.38 (9.7)  | 3.40 (86.4) | N/A         | 0.24 (6.1) | 0.07 (1.8) | 0.12 (3.0) | N/A | N/A        |
| 11  | 3.47 (88.1)  | 0.70 (17.8) | 0.38 (9.7)  | 2.00 (50.8) | N/A         | 0.26 (6.6) | 0.10 (2.5) | 0.12 (3.0) | N/A | N/A        |
| 12  | 3.47 (88.1)  | 0.70 (17.8) | 0.50 (12.7) | 2.00 (50.8) | N/A         | 0.26 (6.6) | 0.10 (2.5) | 0.12 (3.0) | (3) | 0.34 (8.6) |
| 13  | 2.10 (53.3)  | 0.70 (17.8) | 0.38 (9.7)  | 1.00 (25.4) | N/A         | 0.26 (6.6) | 0.10 (2.5) | 0.12 (3.0) | N/A | N/A        |
| 14  | 2.09 (53.1)  | 0.70 (17.8) | 0.50 (12.7) | 1.00 (25.4) | N/A         | 0.26 (6.6) | 0.10 (2.5) | 0.12 (3.0) | (3) | 0.34 (8.6) |
| 15  | 1.36 (34.5)  | 0.60 (15.2) | 0.38 (9.7)  | 0.50 (12.7) | N/A         | 0.26 (6.6) | 0.09 (2.3) | 0.12 (3.0) | N/A | N/A        |
| 16  | 1.36 (34.5)  | 0.66 (16.8) | 0.38 (9.7)  | 0.50 (12.7) | N/A         | 0.26 (6.6) | 0.09 (2.3) | 0.12 (3.0) | N/A | N/A        |

Custom frequency ranges, specifications and configurations are also available.

Specification Temperature +25C

(1) Includes frequency sensitivity

(2) Coupling relative to output power

(3) 2-56NC-2B x 0.12 deep

| Model No | Frequency (GHz) | Coupling (1) (dB) | Frequency Sensitivity (dB) | Insertion Loss (dB) max. |      | Directivity (dB) min. | VSWR max. |            | Power                 |                        |           | Fig. |
|----------|-----------------|-------------------|----------------------------|--------------------------|------|-----------------------|-----------|------------|-----------------------|------------------------|-----------|------|
|          |                 |                   |                            | excl. coupled power      | True |                       | Pri. Line | Sec. Line. | avg. incident (watts) | avg. reflected (watts) | Peak (kW) |      |
| A2023-6  | 0.5-2.0         | 6 ± 1.00          | ± 0.75                     | 0.35                     | 2.00 | 23                    | 1.20      | 1.20       | 50                    | 2                      | 3         | 1    |
| A2023-10 | 0.5-2.0         | 10 ± 1.00         | ± 0.75                     | 0.35                     | 0.90 | 23                    | 1.20      | 1.20       | 50                    | 5                      | 3         | 1    |
| A2023-20 | 0.5-2.0         | 20 ± 1.00         | ± 0.75                     | 0.35                     | 0.40 | 23                    | 1.20      | 1.20       | 50                    | 50                     | 3         | 2    |
| A4224-10 | 0.6-4.0         | 10 ± 1.00         | ± 0.75                     | 0.40                     | 0.90 | 18                    | 1.25      | 1.30       | 50                    | 5                      | 3         | 10   |
| A2034-6  | 1.0-4.0         | 6 ± 1.00          | ± 0.50                     | 0.35                     | 2.00 | 23                    | 1.20      | 1.20       | 50                    | 2                      | 3         | 3    |
| A2034-10 | 1.0-4.0         | 10 ± 1.00         | ± 0.50                     | 0.35                     | 0.90 | 23                    | 1.20      | 1.20       | 50                    | 5                      | 3         | 3    |
| A2034-20 | 1.0-4.0         | 20 ± 1.00         | ± 0.50                     | 0.40                     | 0.45 | 23                    | 1.20      | 1.20       | 50                    | 50                     | 3         | 4    |
| A4238-10 | 1.0-18.0(2)     | 10 ± 1.00         | ± 0.50                     | 0.90                     | 1.50 | 15 12                 | 1.40      | 1.50       | 25                    | 5                      | 1         | 11   |
| A4238-16 | 1.0-18.0(2)     | 16 ± 1.00         | ± 0.50                     | 0.80                     | 0.90 | 15 12                 | 1.40      | 1.50       | 25                    | 20                     | 1         | 12   |
| A4238-20 | 1.0-18.0(2)     | 20 ± 1.00         | ± 0.50                     | 0.80                     | 0.90 | 15 12                 | 1.40      | 1.50       | 25                    | 25                     | 1         | 12   |
| A2045-6  | 2.0-8.0         | 6 ± 1.00          | ± 0.30                     | 0.50                     | 2.20 | 20                    | 1.25      | 1.25       | 50                    | 2                      | 3         | 5    |
| A2045-10 | 2.0-8.0         | 10 ± 1.00         | ± 0.30                     | 0.35                     | 1.00 | 20                    | 1.25      | 1.25       | 50                    | 5                      | 3         | 5    |
| A2045-20 | 2.0-8.0         | 20 ± 1.00         | ± 0.40                     | 0.40                     | 0.45 | 20                    | 1.25      | 1.25       | 50                    | 50                     | 3         | 6    |
| A4248-6  | 2.0-18.0(2)     | 6 ± 1.00          | ± 0.50                     | 0.90                     | 2.00 | 15 12                 | 1.40      | 1.50       | 25                    | 2                      | 1         | 13   |
| A4248-10 | 2.0-18.0(2)     | 10 ± 1.00         | ± 0.50                     | 0.80                     | 1.30 | 15 12                 | 1.40      | 1.50       | 25                    | 5                      | 1         | 13   |
| A4248-16 | 2.0-18.0(2)     | 16 ± 1.00         | ± 0.50                     | 0.80                     | 0.90 | 15 12                 | 1.35      | 1.40       | 25                    | 20                     | 1         | 14   |
| A4248-20 | 2.0-18.0(2)     | 20 ± 1.00         | ± 0.50                     | 0.80                     | 0.90 | 15 12                 | 1.35      | 1.40       | 25                    | 25                     | 1         | 14   |
| A2056-6  | 4.0-12.4        | 6 ± 1.00          | ± 0.30                     | 0.50                     | 2.20 | 17                    | 1.30      | 1.30       | 50                    | 2                      | 2         | 7    |
| A2056-10 | 4.0-12.4        | 10 ± 1.00         | ± 0.30                     | 0.50                     | 1.20 | 17                    | 1.30      | 1.30       | 50                    | 5                      | 2         | 7    |
| A2056-20 | 4.0-12.4        | 20 ± 1.00         | ± 0.40                     | 0.50                     | 0.55 | 17                    | 1.30      | 1.30       | 50                    | 50                     | 2         | 8    |
| A4258-6  | 4.0-18.0        | 6 ± 1.00          | ± 0.50                     | 0.90                     | 2.00 | 15 12                 | 1.35      | 1.40       | 25                    | 2                      | 1         | 15   |
| A4258-10 | 4.0-18.0        | 10 ± 1.00         | ± 0.50                     | 0.80                     | 1.00 | 15 12                 | 1.35      | 1.40       | 25                    | 5                      | 1         | 15   |
| A4258-20 | 4.0-18.0        | 20 ± 1.00         | ± 0.50                     | 0.60                     | 0.70 | 15 12                 | 1.40      | 1.40       | 25                    | 25                     | 1         | 16   |
| A2068-10 | 7.0-18.0        | 10 ± 1.25         | ± 0.75                     | 0.60                     | 1.10 | 15                    | 1.35      | 1.40       | 50                    | 5                      | 1         | 9    |

We reserve the right to change standard product specifications without notice but will be pleased to consider control drawings for quotation.