

## HIGH POWER 1000 WATT BIDIRECTIONAL COUPLERS

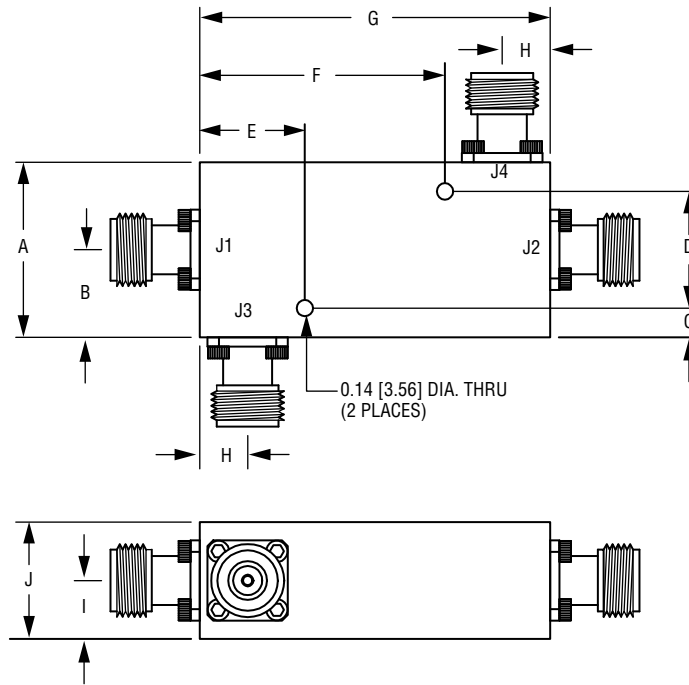
| FREQ.<br>(GHz) | MODEL<br>NUMBER  | COUPLING<br>(dB) | FREQ.<br>FLATNESS<br>(±dB) | INSERTION<br>LOSS<br>(dB, Max.) | DIRECTIVITY<br>(dB, Typ.) | VSWR<br>(Max.) |              | POWER<br>(Watts, Max.) |                 |              | OUTLINE |
|----------------|------------------|------------------|----------------------------|---------------------------------|---------------------------|----------------|--------------|------------------------|-----------------|--------------|---------|
|                |                  |                  |                            |                                 |                           | PRI.<br>LINE   | SEC.<br>LINE | AVG.<br>FORWARD        | AVG.<br>REVERSE | PEAK<br>(kW) |         |
| 0.02–0.1       | CD2-200-101-30NK | 30 ±0.5          | 0.75                       | 0.3                             | 25                        | 1.15:1         | Note 1       | 1000                   | 1000            | 10           | 2       |
|                | CD2-200-101-40NK | 40 ±0.5          | 0.75                       | 0.2                             | 25                        | 1.15:1         | Note 1       | 1000                   | 1000            | 10           | 2       |
| 0.1–0.5        | CD2-101-501-30NK | 30 ±0.5          | 0.6                        | 0.4                             | 25                        | 1.15:1         | Note 1       | 1000                   | 1000            | 10           | 1       |
|                | CD2-101-501-40NK | 40 ±0.5          | 0.6                        | 0.3                             | 25                        | 1.15:1         | Note 1       | 1000                   | 1000            | 10           | 1       |
| 0.225–0.4      | CD2-225-401-30NK | 30 ±0.5          | 0.25                       | 0.25                            | 25                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 1       |
|                | CD2-225-401-40NK | 40 ±0.5          | 0.25                       | 0.2                             | 25                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 1       |
| 0.4–1          | CD2-401-102-30NK | 30 ±0.5          | 0.3                        | 0.2                             | 25                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 2       |
|                | CD2-401-102-40NK | 40 ±0.5          | 0.3                        | 0.2                             | 25                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 2       |
| 0.8–1.6        | CD2-801-162-30NK | 30 ±0.5          | 0.3                        | 0.2                             | 24                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 2       |
|                | CD2-801-162-40NK | 40 ±0.5          | 0.3                        | 0.2                             | 24                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 2       |
| 1–2            | CD2-102-202-30NK | 30 ±0.5          | 0.75                       | 0.2                             | 24                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 1       |
|                | CD2-102-202-40NK | 40 ±0.5          | 0.75                       | 0.2                             | 25                        | 1.15:1         | 1.2:1        | 1000                   | 1000            | 10           | 1       |

See outline drawings on pages 40 and 41.

**NOTES:**

1. Coupled ports on these models use a compensation network which has a poor VSWR. These units are matched and aligned for use in a 50 ohm impedance system.
2. Standard connectors are type "N" female on all ports. Other connectors are available upon request. (Consult factory for power rating)
3. High power terminations are internal to all units except the 0.2 – 5.2 GHz models.

# HIGH POWER 1000 WATT BIDIRECTIONAL COUPLER OUTLINE DRAWING

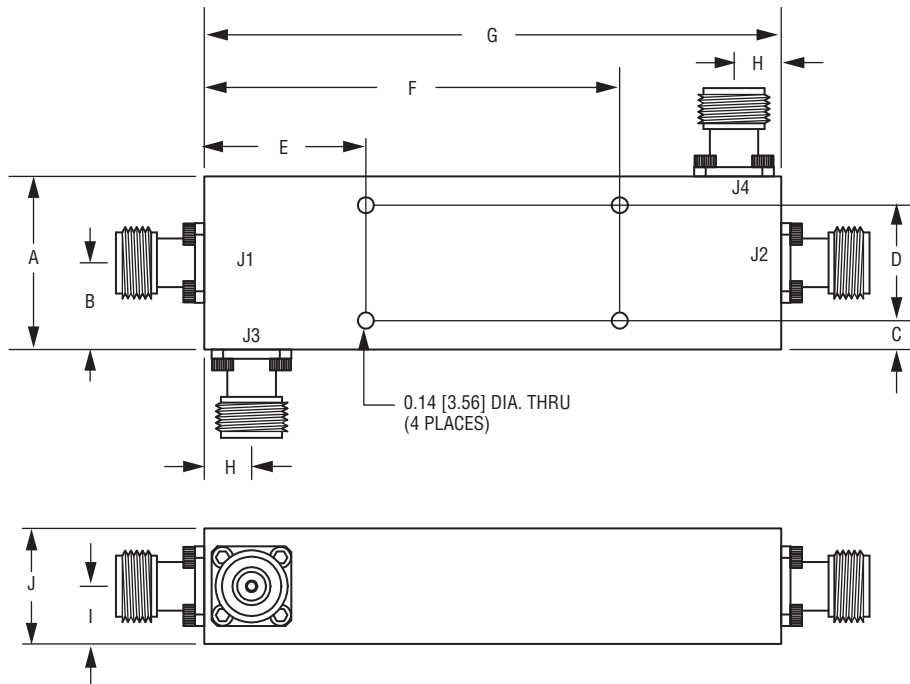


| MODEL NUMBER     | DIMENSION |          |         |          |         |         |         |         |         |         |
|------------------|-----------|----------|---------|----------|---------|---------|---------|---------|---------|---------|
|                  | A         | B        | C       | D        | E       | F       | G       | H       | I       | J       |
| <b>OUTLINE 1</b> |           |          |         |          |         |         |         |         |         |         |
| CD2-101-501-30NK | 1.80      | 0.90     | 0.45    | 0.90     | 1.00    | 2.50    | 3.50    | 0.58    | 0.50    | 1.05    |
| CD2-101-501-40NK | [45.72]   | [22.86]  | [11.43] | [22.86]  | [25.40] | [63.50] | [88.90] | [14.73] | [12.70] | [26.67] |
| CD2-225-401-30NK | 1.375     | 0.688    | 0.25    | 0.875    | 1.00    | 2.50    | 3.50    | 0.65    | 0.56    | 1.12    |
| CD2-225-401-40NK | [34.925]  | [17.475] | [6.35]  | [22.225] | [25.40] | [63.50] | [88.90] | [16.51] | [14.22] | [28.45] |
| CD2-102-202-30NK | 1.80      | 0.90     | 0.30    | 1.20     | 1.00    | 2.50    | 3.50    | 0.58    | 0.65    | 1.30    |
| CD2-102-202-40NK | [45.72]   | [22.86]  | [7.62]  | [30.48]  | [25.40] | [63.50] | [88.90] | [14.73] | [16.51] | [33.02] |

NOTE: DIMENSIONS SHOWN IN BRACKETS [ ] ARE IN MILLIMETERS.



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| MODEL NUMBER     | DIMENSION |          |         |          |         |          |          |         |          |         |
|------------------|-----------|----------|---------|----------|---------|----------|----------|---------|----------|---------|
|                  | A         | B        | C       | D        | E       | F        | G        | H       | I        | J       |
| <b>OUTLINE 2</b> |           |          |         |          |         |          |          |         |          |         |
| CD2-200-101-30NK | 1.375     | 0.688    | 0.25    | 0.875    | 1.50    | 6.00     | 7.50     | 0.55    | 0.575    | 1.16    |
| CD2-200-101-40NK | [34.925]  | [17.475] | [6.35]  | [22.225] | [38.10] | [152.40] | [190.50] | [13.97] | [14.605] | [29.46] |
| CD2-401-102-30NK | 2.50      | 1.28     | 0.25    | 1.89     | 2.10    | 5.10     | 7.20     | 0.51    | 0.50     | 1.10    |
| CD2-401-102-40NK | [63.50]   | [32.51]  | [6.35]  | [48.01]  | [53.34] | [129.54] | [182.88] | [12.95] | [12.70]  | [27.94] |
| CD2-801-162-30NK | 1.60      | 0.805    | 0.40    | 0.80     | 1.50    | 4.00     | 5.50     | 0.67    | 0.60     | 1.30    |
| CD2-801-162-40NK | [40.64]   | [20.447] | [10.16] | [20.32]  | [38.10] | [101.60] | [139.70] | [17.02] | [15.24]  | [33.02] |

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