

Couplers

50 Years of
Excellence

0.5-18 GHz

**SMA and Type N
Broadband Coaxial
Directional Couplers**

- Flat Frequency Response
- Small Size, Lightweight
- Very Low, Fine Grain Ripple

**Specifications**

| FREQUENCY RANGE GHz | CON-NECTOR | MODEL | NOMINAL COUPLING** dB | DIRECTIVITY dB | | INSERTION LOSS EXCLUDING COUPLED POWER | | VSWR | | FREQUENCY* SENSITIVITY dB | MAXIMUM DEVIATION from NOMINAL dB | POWER | | WEIGHT | |
|------------------------|------------|----------|--------------------------|-------------------|--------|--|---------------|--------------------------|----------------------------|---------------------------------|--|------------|---------|-------------|-----|
| | | | | 1-8 | 8-12.4 | COUPLED POWER | TRUE (max) | PRIMARY LINE (max) | SECONDARY LINE (max) | | | AVG. Watts | PEAK kW | (max) Oz | Gr |
| 1-12.4 | SMA | 4202B-6 | 6 | 15 | 12 | 0.75 | 2.00 | 1.35 | 1.5 | ±0.5 | ±1.5 | 20 | 3 | 2.8 | 80 |
| | SMA | 4202B-10 | 10 | 15 | 12 | 0.70 | 1.30 | 1.35 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 2.9 | 83 |
| | SMA | 4202B-20 | 20 | 15 | 15 | 0.70 | 0.75 | 1.35 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 2.9 | 83 |
| | N | 3202B-10 | 10 | 15 | 12 | 0.70 | 1.30 | 1.35 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 4.5 | 128 |
| | N | 3202B-20 | 20 | 15 | 15 | 1.00 | 1.05 | 1.35 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 4.5 | 128 |

| FREQUENCY RANGE GHz | CON-NECTOR | MODEL | NOMINAL COUPLING** dB | DIRECTIVITY dB | | INSERTION LOSS EXCLUDING COUPLED POWER | | VSWR | | FREQUENCY* SENSITIVITY dB | MAXIMUM DEVIATION from NOMINAL dB | POWER | | WEIGHT | |
|------------------------|------------|---------|--------------------------|-------------------|---------|--|---------------|--------------------------|----------------------------|---------------------------------|--|------------|---------|-------------|----|
| | | | | 2-12.4 | 12.4-18 | COUPLED POWER | TRUE (max) | PRIMARY LINE (max) | SECONDARY LINE (max) | | | AVG. Watts | PEAK kW | (max) Oz | Gr |
| 2-18 | SMA | 4203-6 | 6 | 15 | 12 | 0.90 | 2.00 | 1.40 | 1.40 | ±0.5 | ±1.0 | 20 | 3 | 2.0 | 59 |
| | SMA | 4203-10 | 10 | 15 | 12 | 0.90 | 1.40 | 1.35 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 2.2 | 55 |
| | SMA | 4203-16 | 16 | 15 | 12 | 0.65 | 0.80 | 1.35 | 1.40 | ±0.5 | ±1.0 | 20 | 3 | 1.8 | 51 |
| | N | 3203-16 | 16 | 15 | 12 | 0.85 | 1.00 | 1.40 | 1.40 | ±0.5 | ±1.0 | 20 | 3 | 3.4 | 96 |
| 1-18 | SMA | 4222-16 | 16 | 15 | 12 | 0.80 | 0.90 | 1.40 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 2.3 | 65 |
| | N | 3222-16 | 16 | 15 | 12 | 0.80 | 0.90 | 1.40 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 3.4 | 96 |

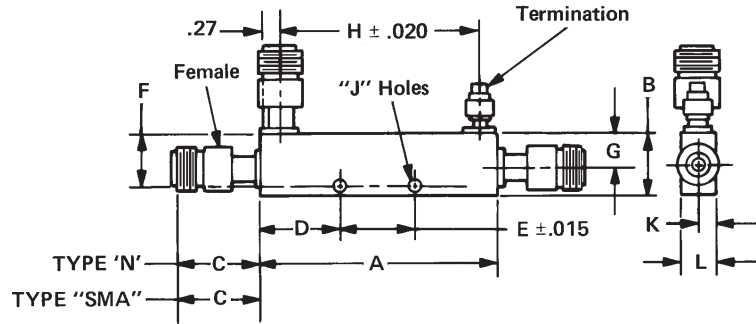
| FREQUENCY RANGE GHz | CON-NECTOR | MODEL | NOMINAL COUPLING** dB | DIRECTIVITY dB | | INSERTION LOSS EXCLUDING COUPLED POWER | | VSWR | | FREQUENCY* SENSITIVITY dB | MAXIMUM DEVIATION from NOMINAL dB | POWER | | WEIGHT | |
|------------------------|------------|---------|--------------------------|-------------------|---------|--|---------------|--------------------------|----------------------------|---------------------------------|--|------------|---------|-------------|----|
| | | | | 0.5-12.4 | 12.4-18 | COUPLED POWER | TRUE (max) | PRIMARY LINE (max) | SECONDARY LINE (max) | | | AVG. Watts | PEAK kW | (max) oz | gr |
| 0.5-18 | SMA | 4226-10 | 10 | 15 | 12 | 0.85 | 1.5 | 1.5 | 1.5 | ±1.1 | ±1.0 | 20 | 3 | 3.4 | 97 |
| | SMA | 4226-20 | 20 | 15 | 12 | 0.85 | 0.9 | 1.5 | 1.5 | ±1.1 | ±1.0 | 20 | 3 | 3.4 | 97 |

*4226 Series coupling **excludes** frequency sensitivity from coupling variation specification. For other models, frequency sensitivity is included in coupling variation.

**Coupling is referenced to the output port.



Outline Drawing



| MODEL | A | B | C | D | E | F | G | H | K | L | "J" HOLES |
|--------------|------|-----|------|------|-------|-----|-----|-------|-----|-----|---|
| 3202B-10 | 3.24 | .88 | 1.10 | 1.12 | 1.000 | .71 | .48 | 2.717 | .28 | .57 | .104 ^{+.004} _{-.002} |
| 4202B-6, -10 | 3.24 | .88 | 0.38 | 1.12 | 1.000 | .71 | .48 | 2.717 | .28 | .57 | |
| 3202B-20 | 3.48 | .73 | 1.10 | .58 | 2.319 | .62 | .44 | 2.943 | .28 | .56 | |
| 4202B-20 | 3.48 | .73 | .38 | .58 | 2.319 | .62 | .44 | 2.943 | .28 | .56 | |
| 3203-16 | 2.12 | .73 | 1.23 | .58 | 0.958 | .37 | .43 | 1.584 | .28 | .56 | 2-56 NC-2B Tapped Holes 1/8 DP Both Sides |
| 4203-16 | 2.12 | .73 | .38 | .58 | 0.958 | .37 | .43 | 1.584 | .28 | .56 | |
| 3222-16 | 3.51 | .73 | 1.23 | .75 | 2.000 | .36 | .44 | 2.969 | .27 | .54 | 4-40 NC-2B Tapped Holes 1/8 DP Both Sides |
| 4222-16 | 3.51 | .73 | .38 | .75 | 2.000 | .36 | .44 | 2.969 | .27 | .54 | |
| 4203-6 | 2.16 | .89 | .38 | .52 | 1.125 | .44 | .50 | 1.615 | .28 | .56 | |
| 4203-10 | 2.16 | .89 | .38 | .52 | 1.125 | .44 | .50 | 1.615 | .28 | .56 | |
| 4226-10, -20 | 4.40 | .77 | .38 | .77 | 2.906 | .39 | .50 | 3.900 | .28 | .57 | |



All dimensions are max. unless otherwise specified.