



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Couplers

0.5-18 GHz

SMA and Type N Broadband Coaxial Directional Couplers

- Flat Frequency Response
- Small Size, Lightweight
- Very Low, Fine Grain Ripple
- Designed for MIL Environments



Specifications

Type N (F) and SMA (F), 1 to 12.4 GHz, 20 W

| FREQUENCY RANGE (GHz) | MODEL | CONNECTOR | NOMINAL COUPLING** (dB) | DIRECTIVITY (dB) | | INSERTION LOSS (dB) | | VSWR | | FREQUENCY SENSITIVITY* (dB) | MAXIMUM DEVIATION FROM NOMINAL (dB) | POWER | | WEIGHT (max.) | |
|-----------------------|----------|-----------|-------------------------|------------------|--------|-------------------------|-------------|---------------------|-----------------------|-----------------------------|-------------------------------------|-------------|-----------|---------------|-----|
| | | | | 1-8 | 8-12.4 | EXCLUDING COUPLED POWER | TRUE (max.) | PRIMARY LINE (max.) | SECONDARY LINE (max.) | | | AVERAGE (W) | PEAK (kW) | oz. | gr. |
| 1-12.4 | 4202B-6 | SMA | 6 | 15 | 12 | 0.70 | 2.35 | 1.35 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 2.8 | 80 |
| | 4202B-10 | SMA | 10 | 15 | 12 | 0.70 | 1.30 | 1.35 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 2.7 | 77 |
| | 4202B-20 | SMA | 20 | 15 | 15 | 0.70 | 0.75 | 1.35 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 2.7 | 77 |
| | 3202B-10 | N | 10 | 15 | 12 | 0.70 | 1.30 | 1.45 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 4.5 | 128 |
| | 3202B-20 | N | 20 | 15 | 15 | 1.00 | 1.05 | 1.45 | 1.50 | ±0.5 | ±1.5 | 20 | 3 | 4.5 | 128 |

Type N (F) and SMA (F), 2 to 18 GHz, 20 W

| FREQUENCY RANGE (GHz) | MODEL | CONNECTOR | NOMINAL COUPLING** (dB) | DIRECTIVITY (dB) | | INSERTION LOSS (dB) | | VSWR | | FREQUENCY SENSITIVITY* (dB) | MAXIMUM DEVIATION FROM NOMINAL (dB) | POWER | | WEIGHT (max.) | |
|-----------------------|---------|-----------|-------------------------|------------------|---------|-------------------------|-------------|---------------------|-----------------------|-----------------------------|-------------------------------------|-------------|-----------|---------------|-----|
| | | | | 2-12.4 | 12.4-18 | EXCLUDING COUPLED POWER | TRUE (max.) | PRIMARY LINE (max.) | SECONDARY LINE (max.) | | | AVERAGE (W) | PEAK (kW) | oz. | gr. |
| 2-18 | 4203-6 | SMA | 6 | 15 | 12 | 0.90 | 2.00 | 1.40 | 1.40 | ±0.5 | ±1.0 | 20 | 3 | 2.0 | 59 |
| | 4203-10 | SMA | 10 | 15 | 12 | 0.90 | 1.40 | 1.35 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 2.2 | 65 |
| | 4203-16 | SMA | 16 | 15 | 12 | 0.65 | 0.80 | 1.35 | 1.40 | ±0.5 | ±1.0 | 20 | 3 | 1.8 | 51 |
| | 3203-16 | N | 16 | 15 | 12 | 0.85 | 1.00 | 1.40 | 1.40 | ±0.5 | ±1.0 | 20 | 3 | 3.4 | 96 |

Type N (F) and SMA (F), 1 to 18 GHz, 20 W

| FREQUENCY RANGE (GHz) | MODEL | CONNECTOR | NOMINAL COUPLING** (dB) | DIRECTIVITY (dB) | | INSERTION LOSS (dB) | | VSWR | | FREQUENCY SENSITIVITY* (dB) | MAXIMUM DEVIATION FROM NOMINAL (dB) | POWER | | WEIGHT (max.) | |
|-----------------------|---------|-----------|-------------------------|------------------|---------|-------------------------|-------------|---------------------|-----------------------|-----------------------------|-------------------------------------|-------------|-----------|---------------|-----|
| | | | | 1-12.4 | 12.4-18 | EXCLUDING COUPLED POWER | TRUE (max.) | PRIMARY LINE (max.) | SECONDARY LINE (max.) | | | AVERAGE (W) | PEAK (kW) | oz. | gr. |
| 1-18 | 4222-16 | SMA | 16 | 15 | 12 | 0.80 | 0.90 | 1.40 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 2.5 | 74 |
| | 3222-16 | N | 16 | 15 | 12 | 1.15 | 1.25 | 1.40 | 1.50 | ±0.5 | ±1.0 | 20 | 3 | 4.3 | 122 |

* Frequency sensitivity is included in coupling variation

** Coupling is referenced to the output port

SMA (F), 0.5 to 18 GHz, 20 W

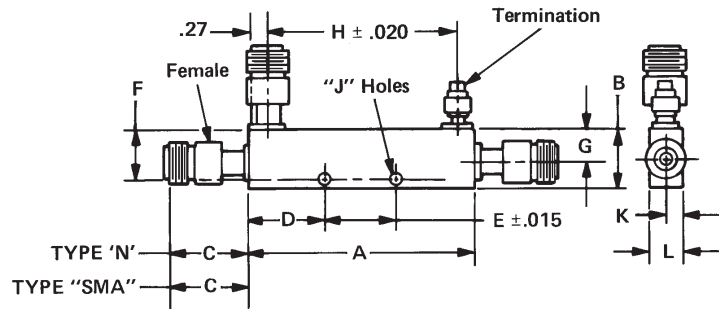
| FREQUENCY RANGE (GHz) | MODEL | CONNECTOR | NOMINAL COUPLING* (dB) | DIRECTIVITY (dB) | | INSERTION LOSS TRUE (dB max.) | VSWR | | FREQUENCY SENSITIVITY (dB) | MAXIMUM DEVIATION FROM NOMINAL (dB) | POWER | | WEIGHT (max.) | |
|-----------------------|---------|-----------|------------------------|------------------|---------|-------------------------------|---------------------|-----------------------|----------------------------|-------------------------------------|-------------|-----------|---------------|-----|
| | | | | 0.5-12.4 | 12.4-18 | | PRIMARY LINE (max.) | SECONDARY LINE (max.) | | | AVERAGE (W) | PEAK (kW) | oz. | gr. |
| 0.5-18 | 4226-10 | SMA | 10 | 15 | 12 | 1.50 | 1.50 | 1.50 | ± 1.1 | ±1.0 | 20 | 3 | 3.9 | 110 |
| | 4226-20 | SMA | 20 | 15 | 12 | 0.90 | 1.50 | 1.50 | ± 1.1 | ±1.0 | 20 | 3 | 3.9 | 110 |

* 4226 Series coupling is average

$$\left(\frac{C_{max.} + C_{min.}}{2} \right)$$

and is referenced to the output port

Outline Drawing



Allow .020 max. build-up of sealant per surface.

| 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 | .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 | .57 | |
| 4202B-20 | 3.48 | .73 | .38 | .58 | 2.319 | .62 | .44 | 2.943 | .28 | .57 | 2-56 NC-2B Tapped Holes 1/8 DP Both Sides |
| 3203-16 | 2.12 | .73 | 1.26 | .58 | .958 | .36 | .43 | 1.580 | .28 | .56 | |
| 4203-16 | 2.12 | .73 | .38 | .58 | .958 | .36 | .43 | 1.580 | .28 | .56 | 4-40 NC-2B Tapped Holes 1/8 DP Both Sides |
| 3222-16 | 3.53 | .75 | 1.18 | .77 | 2.000 | .38 | .44 | 2.969 | .27 | .54 | |
| 4222-16 | 3.53 | .75 | .38 | .77 | 2.000 | .38 | .44 | 2.969 | .27 | .54 | 4-40 NC-2B Tapped Holes 1/8 DP Both Sides |
| 4203-6, -10 | 2.16 | .89 | .38 | .52 | 1.125 | .44 | .50 | 1.620 | .28 | .56 | |
| 4226-10, -20 | 4.40 | .77 | .38 | .77 | 2.906 | .39 | .50 | 3.900 | .28 | .57 | |

Dimensions in inches, unless otherwise specified.

