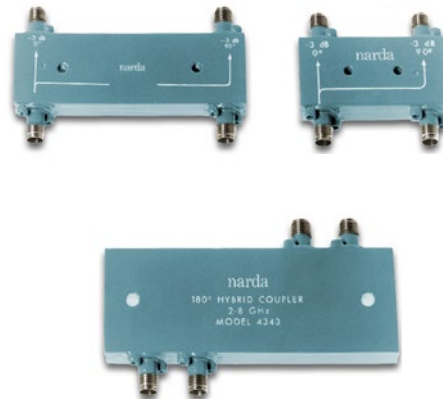


## Hybrids

2-18 GHz

### SMA Multi-Octave 90° and 180° Hybrids

- Smallest Size and Weight
- Multi-Octave Bandwidth
- Excellent Phase Balance
- Low VSWR
- High Isolation
- Rigid Construction Resists Shock and Vibration
- Operational to 105°C without Degradation (125°C storage)



### Specifications

90°, SMA (F), 2 to 18 GHz, 30 W

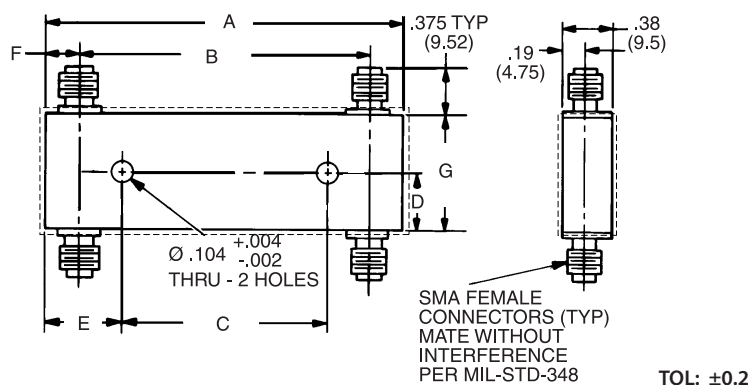
| FREQUENCY<br>RANGE<br>(GHz) | MODEL | NOMINAL<br>COUPLING<br>(dB) | VSWR<br>(max.) | INSERTION<br>LOSS<br>(dB max.) | ISOLATION<br>(dB min.) | AMPLITUDE<br>BALANCE<br>(dB) | PHASE<br>BALANCE | POWER          |              | WEIGHT |     |
|-----------------------------|-------|-----------------------------|----------------|--------------------------------|------------------------|------------------------------|------------------|----------------|--------------|--------|-----|
|                             |       |                             |                |                                |                        |                              |                  | AVERAGE<br>(W) | PEAK<br>(kW) | oz.    | gr. |
| 2-8                         | 4333  | 3                           | 1.4            | 0.75                           | 24                     | ±0.5                         | ±5°              | 30             | 3            | 2.7    | 75  |
| 6-18                        | 4336  | 3                           | 1.5            | 0.85                           | 14                     | ±0.7                         | ±6°              | 30             | 3            | 1.0    | 28  |

180°, SMA (F), 2 to 18 GHz, 30 W

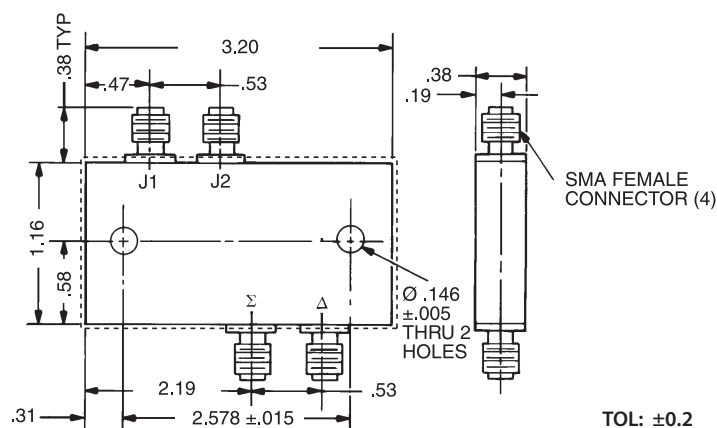
| FREQUENCY<br>RANGE<br>(GHz) | MODEL | NOMINAL<br>COUPLING<br>(dB) | VSWR<br>(max.) | INSERTION<br>LOSS<br>(dB max.) | ISOLATION<br>(dB min.) | AMPLITUDE<br>BALANCE<br>(dB) | PHASE<br>BALANCE | POWER          |              | WEIGHT |     |
|-----------------------------|-------|-----------------------------|----------------|--------------------------------|------------------------|------------------------------|------------------|----------------|--------------|--------|-----|
|                             |       |                             |                |                                |                        |                              |                  | AVERAGE<br>(W) | PEAK<br>(kW) | oz.    | gr. |
| 2-8                         | 4343* | 3                           | 1.5            | 1.30                           | 17                     | ±0.5                         | ±13°             | 30             | 3            | 2.2    | 62  |

\* Special-order unit, minimum quantity may apply

## Outline Drawings



| MODEL | A               | B               | C $\pm 0.015$    | D              | E              | F             | G               |
|-------|-----------------|-----------------|------------------|----------------|----------------|---------------|-----------------|
| 4333  | 2.71<br>(68.71) | 2.20<br>(56.01) | 1.561<br>(39.65) | .43<br>(10.95) | .57<br>(14.53) | .25<br>(6.35) | .860<br>(21.89) |
| 4336  | 1.25<br>(31.75) | 0.80<br>(20.32) | 0.375<br>(9.52)  | .40<br>(10.21) | .44<br>(11.10) | .23<br>(5.71) | .804<br>(20.42) |



MODEL 4343

Allow .020 for sealant build-up per surface.  
Dimensions in inches (mm in parentheses), unless otherwise specified.