

## Model 1506A Broadband Resistive Power Divider

dc to 18.0 GHz  
1 Watt

### Type N Connectors



### Features

- /// **Accurate Division and Low Frequency Sensitivity** - The symmetry of output power between the two arms is excellent across the frequency range.
- /// **High Stability** - Low temperature and power coefficients ensure attenuation stability.
- /// **Test data Data** - Each divider is calibrated at four frequencies, and the data is supplied on a permanently attached test data plate.
- /// **Matched Ports** - Symmetrical 6 dB division permits any port to be used as input.

### Specifications

**NOMINAL IMPEDANCE:** 50  $\Omega$

**FREQUENCY RANGE:** dc to 18.0 GHz

**MAXIMUM INPUT POWER:** 1 watt CW, 1 kilowatt peak (5  $\mu$ sec pulse width, 0.05 % duty cycle)

**INSERTION LOSS (between input & one output arm):** 6 dB nominal, -0.2, +1.2 dB maximum to 10.0 GHz; +1.5 dB maximum to 18.0 GHz.

**NUMBER OF PORTS:** 3, interchangeable for input and output

**PHASE TRACKING:** 5° maximum between ports (J2 & J3) with input connector (J1).

#### AMPLITUDE TRACKING (Maximum):

| Frequency (GHz) | Tracking |
|-----------------|----------|
| dc - 4          | 0.2 dB   |
| 4 - 10          | 0.4 dB   |
| 10 - 18         | 0.5 dB   |

#### MAXIMUM SWR:

| Frequency (GHz) | SWR  |
|-----------------|------|
| dc - 10         | 1.25 |
| 10 - 18         | 1.35 |

**POWER COEFFICIENT:** < 0.005 dB/dB/watt

**TEMPERATURE COEFFICIENT:** < 0.0004 dB/dB/°C

**TEMPERATURE RANGE:** -55°C to +125°C

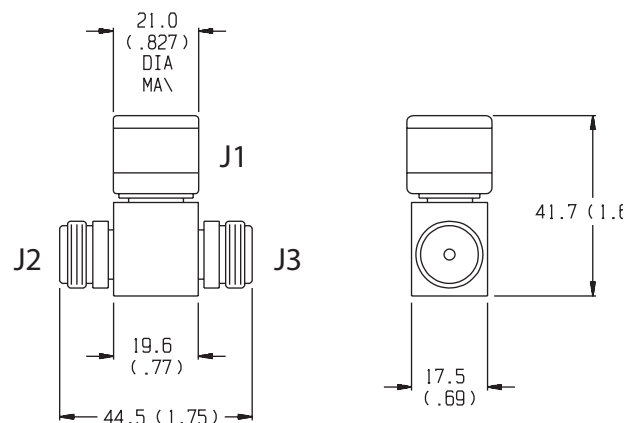
**CONSTRUCTION:** Nickel plated brass body; stainless steel connectors; gold plated beryllium copper contacts.

**TEST DATA:** Insertion loss data supplied at 50 MHz, 6.0, 12.0, and 18.0 GHz on nameplate only. No paper data supplied. Other test data can be provided at additional cost.

**CONNECTORS:** Type N connectors per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connectors.

**WEIGHT:** Net 140 g (5 oz)

**PHYSICAL DIMENSIONS:**



NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.