

Power Splitters & Dividers

Model 1870A, Broadband Resistive Power Divider



(Matching), Precision N Connectors

DC to 18 GHz
1 Watts

Features

These resistive power splitters are intended for RF and wireless applications in which one of the two outputs is included in a leveling loop or is used as a reference in a ratio system, for the purpose of providing an output signal whose source impedance is essentially matched to 50Ω. Some examples are:

- A dual channel insertion loss measuring system (ratio).
- A parallel IF substitution insertion loss measuring system (ratio or ALC loop).
- A precision power source (ratio or ALC loop).

Specifications

Nominal Impedance: 50 Ω

Frequency Range: dc to 18.0 GHz

Insertion Loss: 6 dB nominal, 7.5 dB maximum
(Between Input and either output).

Maximum Input Power: 1 watt average, 1 kilowatt peak (Input connector only).



Maximum Input SWR:

Frequency (GHz)	Maximum SWR
dc - 18	1.30

Equivalent Output SWR (Port 2 & 3):

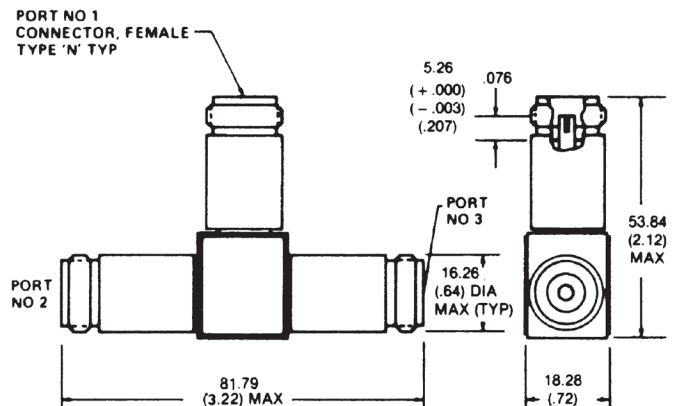
Frequency (GHz)	Maximum SWR
dc - 2	1.05
2 - 4	1.07
4 - 8	1.10
8 - 18	1.15

**When used in a leveling or ratio system.*

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

Weight: Net 170 g (6 oz)

Physical Dimensions:



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

Output Tracking (Between Ports):

Frequency (GHz)	Tracking (maximum dB)
dc - 8	0.15
8 - 18	0.20

Phrase Tracking: +2° nominal between output ports

Power Coefficient: < 0.005 dB/dB/watt

Temperature Coefficient: < 0.0004 dB/dB/°C

Temperature Range: -55 °C to +85 °C

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

Test Data: Insertion Loss, SWR, and Tracking measurements performed across the frequency band. Test data available at additional cost.