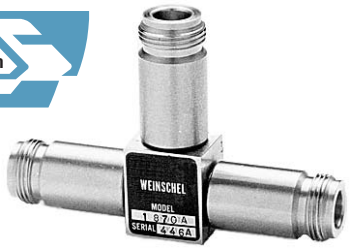
Model 1870A
Broadband Resistive Power Splitter (Matching)

dc to 18.0 GHz
1 Watt

Type N Connectors



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)

OUTPUT TRACKING (Between Ports):	
Frequency (GHz)	Tracking (maximum dB)
dc - 8	0.15
8 -18	0.20

PHASE 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.

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

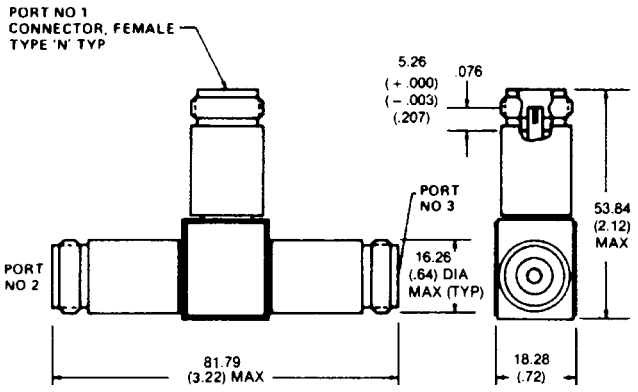
* When used in a leveling or ratio system.

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

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.

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