

Operating Note
Agilent Technologies
11636A Power Divider



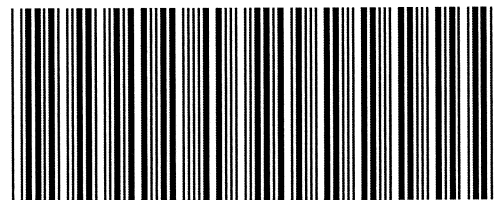
Agilent Technologies

Part Number 11636-90004

Printed in USA

January 1995

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11636-90004

Hewlett-Packard to Agilent Technologies Transition

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Austria <i>(tel)</i> 0820 87 44 11* <i>(fax)</i> 0820 87 44 22	Belgium <i>(tel)</i> (+32) (0)2 404 9340 <i>(alt)</i> (+32) (0)2 404 9000 <i>(fax)</i> (+32) (0)2 404 9395	Denmark <i>(tel)</i> (+45) 7013 1515 <i>(alt)</i> (+45) 7013 7313 <i>(fax)</i> (+45) 7013 1555	Finland <i>(tel)</i> (+358) 10 855 2100 <i>(fax)</i> (+358) (0) 10 855 2923
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From DC to 18.0 GHz, the HP 11636A provides excellent output power symmetry between the two output ports. Low temperature and power coefficients ensure attenuation stability. Each power divider is calibrated at four frequencies, and this data is provided on a sticker that is permanently attached to the unit.

Stable interface dimensions, which ensure long life and a high repeatability of insertion loss, are provided by injection molded interface connector insulators that maintain concentricity.

Any port may be used as an input, as the HP 11636A provides a symmetrical 6 dB division. The HP 11636A can be used as a power combiner. When signals are input at two of the ports, the sum of the two appears at the third.

Specifications

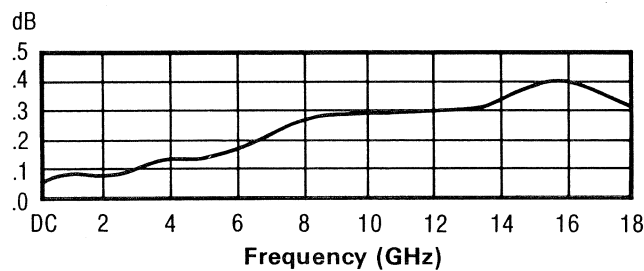
MAXIMUM INPUT POWER: 1W CW, 1 kW peak (5 msec pulse width).

FREQUENCY RANGE: DC to 18.0 GHz.

INPUT/OUTPUT SWR: DC to 10.0 GHz: 1.25
10.0 to 18.0 GHz: 1.35

TRACKING BETWEEN OUTPUT ARMS:

Frequency Range (GHz)	Tracking (dB)
DC to 4.0	0.2
4.0 to 10.0	0.4
10.0 to 18.0	0.5



Typical Tracking Between Output Arms

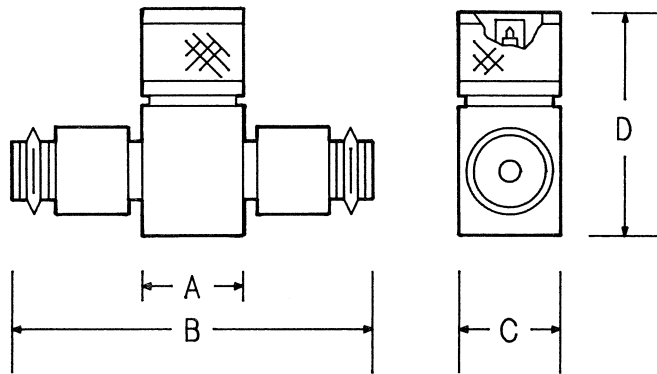
CALIBRATION DATA: Insertion loss at DC, 6.0, 12.0 and 18.0 GHz (data is supplied on a permanently attached sticker).

NUMBER OF PORTS: Three.

CONNECTORS: One Type-N male, two Type-N female.

Specifications (Cont'd)

DIMENSIONS:



NOTE:
Dimensions are given in (cm) inches and are maximum unless otherwise specified.

Dim. A	Dim. B	Dim. C	Dim. D
(1.96) .77	(4.45) 1.75	(1.75) .69	(4.17) 1.64

Supplemental Characteristics

INSERTION LOSS: (Input to One Output Port): 6 dB (−0.2 dB, +1.2 dB maximum to 10.0 GHz; +1.5 dB maximum to 18.0 GHz).

TYPICAL PHASE TRACKING: ±2° between output ports.

POWER COEFFICIENT: <0.0005 dB/dB/W

TEMPERATURE COEFFICIENT: <0.0001 dB/dB/°C

