

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8490D

The Keysight (Agilent) 8490D is a precision coaxial fixed attenuator operating from DC to 50 GHz. It offers flat frequency response, exceptionally low SWR, and stable attenuation across a broad temperature range. Available in nominal values of 3, 6, 10, 20, 30, and 40 dB, this 2.4 mm passive device features swept-frequency verification and comes equipped with an individual calibration nameplate chart.

SPECIFICATIONS

General

Interfaces	None (passive RF coaxial device)
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Physical

Power Supply	None (passive device)
Operating Temperature	0 to +75 °C °C
Dimensions (W×H×D)	52 mm (length) x 13 mm (diameter) mm
Weight	0.015 kg
Connector Material	Passivated stainless steel
Recommended Mating Torque	0.9 N-m (8 lb-in)

RF Performance Specifications

Frequency Range	DC to 50 GHz
Nominal Impedance	50 Ω
Nominal Attenuation Values	3, 6, 10, 20, 30, 40 dB
Maximum Average Input Power	1 W (up to 55 °C)
Power Derating	Derates linearly from 1.0 W at 55 °C to 0.5 W at 75 °C
Maximum Peak Input Power	100 W (for 10 μs pulse width)
Maximum SWR (3, 6, 10, 20, 30 dB): DC to 26.5 GHz	1.15
Maximum SWR (3, 6, 10, 20, 30 dB): 26.5 to 40 GHz	1.25
Maximum SWR (3, 6, 10, 20, 30 dB): 40 to 50 GHz	1.45

Mechanical & Connector Specifications

Connector Type	2.4 mm
Connector Gender	Male to Female (one of each)
Overall Length	52 mm (2.05 in)
Diameter	13 mm (0.51 in)
Net Weight	15 g (0.5 oz)

Environmental & Reliability Specifications

Operating Temperature Range	0 °C to +75 °C
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Ordering Information & Configurations

Base Model Number	8490D
Option 003	3 dB nominal attenuation value
Option 006	6 dB nominal attenuation value
Option 010	10 dB nominal attenuation value
Option 020	20 dB nominal attenuation value
Option 030	30 dB nominal attenuation value
Option 040	40 dB nominal attenuation value

Options

Option UK6	Commercial calibration certificate with test data
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Connectors

Connector Compatibility	2.4 mm
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TECHNOLOGY

Coaxial Fixed Attenuator

APPLICATIONS

RF and microwave signal attenuation, level control, and port matching

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