

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8493A

The Keysight (Agilent/HP) 8493A is a precision coaxial fixed RF attenuator designed for reliable signal level reduction and impedance matching. Operating from DC to 12.4 GHz, it provides exceptionally flat frequency response and low SWR. The attenuator is available in multiple standard nominal attenuation values and features swept-frequency testing to guarantee performance across its entire band, with individual calibration data conveniently provided on a nameplate chart on each unit.

SPECIFICATIONS

Physical

Dimensions (W×H×D)	41 mm (Length) × 10 mm (Diameter) mm
Weight	0.028 kg kg
Shipping Weight	0.113 kg

RF & Electrical Performance

Frequency Range	DC to 12.4 GHz
Nominal Attenuation Options	3 dB, 6 dB, 10 dB, 20 dB, 30 dB
Characteristic Impedance	50 Ω
Maximum SWR (DC to 8 GHz)	1.15
Maximum SWR (8 to 12.4 GHz)	1.25
Maximum Average Input Power	2 W
Maximum Peak Input Power	100 W
Peak Power Pulse Width Limit	10 μ s
Attenuation Accuracy (3 dB Option, DC to 8 GHz)	± 0.3 dB
Attenuation Accuracy (3 dB Option, 8 to 12.4 GHz)	± 0.5 dB
Attenuation Accuracy (6 dB Option, DC to 8 GHz)	± 0.3 dB
Attenuation Accuracy (6 dB Option, 8 to 12.4 GHz)	± 0.5 dB
Attenuation Accuracy (10 dB Option, DC to 8 GHz)	± 0.3 dB
Attenuation Accuracy (10 dB Option, 8 to 12.4 GHz)	± 0.5 dB
Attenuation Accuracy (20 dB Option, DC to 8 GHz)	± 0.5 dB
Attenuation Accuracy (20 dB Option, 8 to 12.4 GHz)	± 0.7 dB
Attenuation Accuracy (30 dB Option, DC to 8 GHz)	± 0.7 dB
Attenuation Accuracy (30 dB Option, 8 to 12.4 GHz)	± 1.0 dB

Mechanical & Material Specifications

Input Connector Type	SMA male
Output Connector Type	SMA female
Connector Gender Configuration	One male, one female

Compliance & Quality Standards

Calibration Chart Location	On nameplate chart attached to each unit
Testing Standard	Swept-frequency tested

Performance

Temperature Coefficient	< 0.0001 dB/dB/ $^{\circ}$ C
Power Coefficient	< 0.005 dB/dB/W

TECHNOLOGY

Coaxial Thin-Film

APPLICATIONS

RF & Microwave Signal Attenuation

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.