

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8495D

The Keysight Technologies (Agilent HP) 8495D is a manual coaxial step attenuator designed for high-frequency RF and microwave applications from DC up to 26.5 GHz. It offers attenuation from 0 to 70 dB in precise 10 dB steps, featuring excellent repeatability of 0.01 dB typical and an exceptionally long lifespan of over 5 million cycles per section. Using precision gold-plated leaf springs, it is highly reliable and suited for precise signal level control in laboratory testing and measurement systems.

SPECIFICATIONS

Physical

Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	38 mm × 56 mm × 133 mm mm
Weight	0.31 kg kg

RF Performance Specifications

Frequency Range	DC to 26.5 GHz
Attenuation Range	0 to 70 dB
Attenuation Step Size	10 dB
Nominal Impedance	50 Ω
Insertion Loss at 0 dB	0.4 dB + 0.09 dB/GHz
Maximum VSWR (DC to 12.4 GHz)	1.35
Maximum VSWR (12.4 to 18 GHz)	1.5
Maximum VSWR (18 to 26.5 GHz)	1.7
Maximum RF Input Power (Average)	1 W
Maximum RF Input Power (Peak)	100 W
Maximum RF Peak Power Pulse Width	10 μ s
Maximum RF Peak Power Duty Cycle	0.001
Attenuation Accuracy at 10 dB (DC to 12.4 GHz)	± 0.3 dB
Attenuation Accuracy at 10 dB (12.4 to 18 GHz)	± 0.4 dB
Attenuation Accuracy at 10 dB (18 to 26.5 GHz)	± 0.5 dB
Attenuation Accuracy at 20 dB (DC to 12.4 GHz)	± 0.5 dB
Attenuation Accuracy at 20 dB (12.4 to 18 GHz)	± 0.6 dB
Attenuation Accuracy at 20 dB (18 to 26.5 GHz)	± 0.7 dB
Attenuation Accuracy at 30 dB (DC to 12.4 GHz)	± 0.7 dB
Attenuation Accuracy at 30 dB (12.4 to 18 GHz)	± 0.8 dB
Attenuation Accuracy at 30 dB (18 to 26.5 GHz)	± 1.0 dB
Attenuation Accuracy at 40 dB (DC to 12.4 GHz)	± 1.0 dB
Attenuation Accuracy at 40 dB (12.4 to 18 GHz)	± 1.2 dB
Attenuation Accuracy at 40 dB (18 to 26.5 GHz)	± 1.6 dB
Attenuation Accuracy at 50 dB (DC to 12.4 GHz)	± 1.2 dB
Attenuation Accuracy at 50 dB (12.4 to 18 GHz)	± 1.6 dB

Attenuation Accuracy at 50 dB (18 to 26.5 GHz)	±2.3 dB
Attenuation Accuracy at 60 dB (DC to 12.4 GHz)	±1.6 dB
Attenuation Accuracy at 60 dB (12.4 to 18 GHz)	±2.0 dB
Attenuation Accuracy at 60 dB (18 to 26.5 GHz)	±2.9 dB
Attenuation Accuracy at 70 dB (DC to 12.4 GHz)	±2.0 dB
Attenuation Accuracy at 70 dB (12.4 to 18 GHz)	±2.4 dB
Attenuation Accuracy at 70 dB (18 to 26.5 GHz)	±3.5 dB

RF Port Characteristics

RF Connector Type	3.5 mm
RF Connector Gender	Female
Repeatability	0.01 dB typical
Repeatability Life	0.03 dB maximum

Control and Electromechanical Specifications

Actuation Type	Manual
Switching Life	5 million cycles per section

Physical and Mechanical Characteristics

Net Weight	310 g (11 oz)
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Environmental Specifications

Operating Temperature Range	0 to +55 °C
Storage Temperature Range	-40 to +75 °C
Operating Humidity Range	95% RH @ 40 °C
Operating Shock	10 g (6 ms)
Non-operating Shock	400 g (2 ms)

Ordering and Configuration Options

Calibration Documentation Option	Option 890 (NIST traceable SWR and attenuation data)
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Environmental

Maximum Altitude (Operating)	4600 m (15000 ft)
Maximum Altitude (Storage)	15200 m (50000 ft)

Internal Construction

Number of Sections	3
Section Attenuation Values	10, 20, 40 dB

TECHNOLOGY

Coaxial Step Attenuator

APPLICATIONS

RF & Microwave Signal Level Control, Laboratory Test & Measurement

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