

KEYSIGHT TECHNOLOGIES (AGILENT HP)

8494B

The Keysight (formerly Agilent / HP) 8494B is a precision manual step attenuator operating from dc to 18 GHz. It offers a total attenuation range of 0 to 11 dB in 1 dB steps, featuring high repeatability (0.03 dB max) and an exceptionally long operating life of over 5 million cycles per section thanks to precision gold-plated leaf springs.

SPECIFICATIONS

RF Performance Characteristics

Frequency Range	dc to 18 GHz
Attenuation Range	0 to 11 dB
Attenuation Step Size	1 dB
Nominal Impedance	50 Ω
Maximum VSWR (dc to 8 GHz)	1.5
Maximum VSWR (8 to 12.4 GHz)	1.6
Maximum VSWR (12.4 to 18 GHz)	1.9
Maximum Insertion Loss (at 0 dB)	0.6 dB + 0.09 dB/GHz
Maximum Average Input Power	1 W
Maximum Peak Input Power	100 W

Mechanical Characteristics and Reliability

Operating Mechanism	Manual
Switching Life (Minimum Cycles)	5,000,000 cycles per section
Attenuation Repeatability (Typical)	0.01 dB
Attenuation Repeatability (Maximum)	0.03 dB
Internal Contacts	Precision gold-plated leaf springs

RF Connectors and Interfaces

Connector Type	Type-N female, SMA female, or APC-7 (configuration dependent)
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Options and Accessories

Calibration Documentation Options	Option 890 (NIST traceable data for SWR and attenuation)
Interconnect Cable Accessories	Compatible with 11716A/B/C interconnect kits for series connection

TECHNOLOGY

RF / Microwave

APPLICATIONS

Test and Measurement

