

KEYSIGHT TECHNOLOGIES (AGILENT HP)

Q347B

The Keysight Technologies (formerly Agilent) Q347B is a millimeter-wave noise source covering the Q-band frequency range of 33 to 50 GHz. This high-precision waveguide noise source is designed for accurate, convenient noise figure measurements on millimeter-wave devices, offering exceptional excess noise ratio (ENR) stability over time to support extended calibration cycles.

SPECIFICATIONS

General

Interfaces	BNC (female) bias/drive connector
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Physical

Power Supply	28 V $\pm$ 1 V pulsed DC (supplied by noise figure analyzer)
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	51 × 51 × 140 mm mm
Weight	0.18 kg
Shipping Weight	0.5 kg

RF & Microwave Performance

Frequency Range	33 to 50 GHz
Waveguide Band	Q-band
Nominal Excess Noise Ratio (ENR)	12 to 16 dB
Maximum SWR (Source On)	< 1.35
Maximum SWR (Source Off)	< 1.35

Ports & Connectors

RF Output Waveguide Size	WR-22
RF Output Flange Type	UG-383/U
Bias Input Connector	BNC female

Bias, Power & Control Interface

Required Bias Voltage (DC)	28 V $\pm$ 1 V
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Environmental & Reliability

Storage Temperature Range	-55 to +75 °C
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Calibration, Traceability & Options

ENR Calibration Frequency Points	Individually calibrated at 1 GHz steps across the operating band
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Calibration

Calibration Traceability	NIST
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RF Specifications

Maximum Reflection Coefficient	0.15
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TECHNOLOGY

Solid-state diode noise generation

APPLICATIONS

Noise figure and gain measurements on millimeter-wave devices

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