

KEYSIGHT TECHNOLOGIES (AGILENT HP)

346C

The Keysight (Agilent) 346C is a broadband coaxial noise source operating from 10 MHz to 26.5 GHz with a nominal Excess Noise Ratio (ENR) of 15 dB. It is designed to provide highly accurate noise figure measurements by featuring individually calibrated ENR values at specific frequencies and a low SWR to minimize measurement uncertainty caused by reflections. Option K01 extends the frequency range to 50 GHz using a 2.4 mm connector.

SPECIFICATIONS

Physical

Power Supply	28.0 ± 1.0 VDC (Drive Voltage)
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	21 × 30 × 140 mm
Weight	0.108 kg

Frequency & Excess Noise Ratio (ENR) Specifications

Frequency Range	10 MHz to 26.5 GHz (Standard) / 1 to 50 GHz (Option K01)
Nominal Excess Noise Ratio (ENR)	15 dB
ENR Calibration Frequencies	Individually calibrated ENR values at specific frequencies

Impedance & S-Parameter Specifications

Characteristic Impedance	50 Ω
Maximum VSWR (Source ON)	1.25 (10 MHz to 18 GHz) / 1.35 (18 GHz to 26.5 GHz)
Maximum VSWR (Source OFF)	1.25 (10 MHz to 18 GHz) / 1.35 (18 GHz to 26.5 GHz)
Maximum Reverse Power (CW)	1 W

Electrical & Power Requirements

Drive Voltage (ON)	28.0 ± 1.0 VDC
Maximum Drive Current	60 mA

Connectors & Interfaces

RF Output Connector	3.5 mm male (Standard) / 2.4 mm male (Option K01)
Power/Drive Input Connector	BNC female

Environmental Specifications

Storage Temperature Range	-55 to +75 °C
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Options & Accessories

Option K01	Broadband coverage from 1 to 50 GHz with 2.4 mm (m) coaxial connector
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Power

Drive Voltage (OFF)	< 1 V
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Performance

ENR Variation with Temperature	< 0.01 dB/°C
ENR Variation with Voltage	< 0.02 dB/V

Environmental

Operating Humidity	Up to 95% RH
Operating Altitude	Up to 4,600 m (15,000 ft)
Storage Altitude	Up to 15,240 m (50,000 ft)

TECHNOLOGY

Broadband RF/Microwave Noise Source

APPLICATIONS

Noise Figure Measurements

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