KEYSIGHT TECHNOLOGIES (AGILENT HP)

# 346A

The Keysight (formerly Agilent/HP) 346A is a broadband RF/microwave noise source designed for accurate noise figure measurements. Covering a frequency range from 10 MHz to 18 GHz with a nominal Excess Noise Ratio (ENR) of 6 dB, it is specifically optimized to characterize input-impedance-sensitive devices such as GaAsFETs and UHF amplifiers. Its exceptionally low change in reflection coefficient from ON to OFF (< 0.01) significantly reduces measurement uncertainty caused by test signal reflections.

## SPECIFICATIONS

### Physical

| | |
|---|---|
| Power Supply | 28 VDC ± 1 V (Bias) |
| Operating Temperature | 0 to 55 °C |
| Dimensions (W×H×D) | 21 × 30 × 140 mm |
| Weight | 0.108 kg |

### Frequency & ENR Specifications

| | |
|---|---|
| Frequency Range | 10 MHz - 18 GHz |

### Impedance & SWR Specifications

| | |
|---|---|
| Nominal Impedance | 50 Ω |
| Maximum SWR (10 MHz to 5 GHz) | 1.15:1 |
| Maximum SWR (5 GHz to 18 GHz) | 1.25:1 |
| Maximum Change in Reflection Coefficient (ON/OFF) | < 0.01 |

### Power & Drive Requirements

| | |
|---|---|
| Drive Voltage (Nominal) | 28 VDC |
| Drive Voltage Tolerance | ± 1 V |

### Connectors & Interfaces

| | |
|---|---|
| Bias / Drive Connector | BNC (female) |
| Output Connector | Type-N (male) or APC-3.5 (male), configuration dependent |

### Environmental Specifications

| | |
|---|---|
| Storage Temperature Range | -55 °C to 75 °C |

### Power

| | |
|---|---|
| Drive Current | 60 mA (maximum) |

### Performance

| | |
|---|---|
| ENR Temperature Coefficient | < 0.009 dB/°C |
| ENR Voltage Coefficient | < 0.01 dB/V |

### Environmental

| | |
|---|---|
| Maximum Operating Altitude | 4600 meters (15,000 ft) |
| Operating Humidity | Up to 95% relative humidity |

## TECHNOLOGY

RF / Microwave

## APPLICATIONS

Noise figure measurement, characterization of input-impedance-sensitive devices (e.g., GaAsFETs, UHF amplifiers)

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