

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85046A

The Keysight (Agilent/HP) 85046A is a 50 Ω S-parameter test set designed for transmission and reflection measurements of two-port devices. Operating over a frequency range of 300 kHz to 3 GHz, it features precision 7 mm test port connectors, a built-in programmable step attenuator, and dual DC bias ports. It is fully controlled by and powered from compatible network analyzers.

SPECIFICATIONS

General

Interfaces	Proprietary interconnect cable (controlled by host network analyzer)
Number of Test Ports	2

Physical

Power Supply	Powered by host network analyzer via interconnect cable
Operating Temperature	0 to 55 °C °C

Frequency and Impedance

Frequency Range	300 kHz to 3 GHz
Nominal Impedance	50 Ω

RF Performance Specifications

Directivity (0.3 to 1300 MHz)	≥ 35 dB
Directivity (1300 to 3000 MHz)	≥ 30 dB
Source Match (0.3 to 1300 MHz)	≥ 20 dB
Source Match (1300 to 3000 MHz)	≥ 16 dB
Load Match (0.3 to 1300 MHz)	≥ 18 dB
Load Match (1300 to 3000 MHz)	≥ 14 dB

Port and Connector Configurations

Test Port Connector Type	Precision 7 mm (APC-7)
RF Input Connector Type	50 Ω Type-N (female)
DC Bias Ports	Two BNC (female) connectors on rear panel

Signal Handling and Power Ratings

Maximum Operating Input Power	+20 dBm
Maximum Damage RF Input Level	+30 dBm (1 W)
Maximum DC Bias Voltage	30 V
Maximum DC Bias Current	500 mA
Internal Attenuator Range	0 to 70 dB (in 10 dB steps)

System Compatibility and Control

Compatible Network Analyzers	HP/Agilent 8753A/B/C, 8753D/E/ES Option 011, 4395, 4396, and selected 8702 configurations
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Connectivity

DC Bias Input Connector	BNC female
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Power

Power Source	Derived from the host network analyzer via the control cable
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Interfaces

RF Input Connector Location	Front panel
Test Port Connector Location	Front panel
DC Bias Ports Location	Rear panel

TECHNOLOGY

RF and Microwave S-Parameter Test Set

APPLICATIONS

Two-port S-parameter 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.