

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85027B

The Keysight (Agilent/HP) 85027B is a high-performance directional bridge designed for high-accuracy reflection measurements from 10 MHz to 26.5 GHz. Highly compatible with Agilent/HP scalar network analyzers, it features integrated detection capabilities for both AC and DC signal modes, offering high directivity and exceptional test port match in coax environments.

SPECIFICATIONS

General

Interfaces	Integrated multi-pin cable for connection to Agilent/HP Scalar Network Analyzers
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Physical

Power Supply	Host-powered via connected scalar network analyzer
Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	22 mm × 26 mm × 178 mm mm
Weight	0.5 kg
Control Cable Length	1.5 m (5 ft)

Frequency & Impedance

Frequency Range	10 MHz to 26.5 GHz
Nominal Impedance	50 Ω

RF Performance

Directivity (0.01 to 20 GHz)	≥ 40 dB
Maximum Insertion Loss (0.01 to 18 GHz)	6.5 dB
Maximum Insertion Loss (18 to 26.5 GHz)	8.0 dB

Power & Electrical Ratings

Maximum Continuous RF Input Power	+23 dBm
Maximum DC Input Voltage	±10 V

Connector & Port Configurations

RF Input Connector Type	3.5 mm
RF Input Connector Gender	Female
Test Port Connector Type	3.5 mm
Test Port Connector Gender	Female

Calibration & Compatibility

Compatible Analyzers (AC/DC Detection)	Agilent 8757
Compatible Analyzers (AC Detection Only)	Agilent 8756, Agilent 8755
Detection Signal Support	AC and DC detection modes (analyzer dependent)

Performance

Directivity (20 to 26.5 GHz)	≥ 31 dB
Test Port SWR (0.01 to 18 GHz)	≤ 1.15
Test Port SWR (18 to 20 GHz)	≤ 1.25
Test Port SWR (20 to 26.5 GHz)	≤ 1.45
RF Input SWR (0.01 to 18 GHz)	≤ 1.35
RF Input SWR (18 to 26.5 GHz)	≤ 1.50

Measurement Capabilities

Dynamic Range (AC Mode)	+16 to -55 dBm
Dynamic Range (DC Mode)	+16 to -50 dBm

TECHNOLOGY

RF & Microwave

APPLICATIONS

Reflection measurements with scalar network analyzers

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