

KEYSIGHT TECHNOLOGIES (AGILENT HP)

85033C

The HP Keysight 85033C is a high-precision 3.5 mm coaxial calibration kit designed for calibrating vector network analyzers such as the HP 8752A or 8753 series. Operating from DC to 26.5 GHz, this kit includes opens, shorts, 50 ohm fixed terminations, and 3.5 mm to 7 mm precision adapters to enable precise measurements of non-insertable devices.

SPECIFICATIONS

Physical

Operating Temperature	15 to 35 °C °C
Dimensions (W×H×D)	285 mm × 72 mm × 181 mm mm
Connector Compatibility	SMA, 3.5 mm

General Specifications

Frequency Range	DC to 6 GHz
Nominal Impedance	50 Ω
Connector Type	3.5 mm
Connector Gender Configurations	Male and Female
Compatible Vector Network Analyzers	HP 8752A, HP 8753A, HP 8753B, HP 8753C

Male Open Standard Specifications

Male Open Frequency Range	DC to 6 GHz
Male Open Electrical Delay	29.243 ps
Male Open C0 (10 ⁻¹⁵ F)	49.43
Male Open C1 (10 ⁻²⁷ F/Hz)	-310.1
Male Open C2 (10 ⁻³⁶ F/Hz ²)	23.17
Male Open C3 (10 ⁻⁴⁵ F/Hz ³)	-0.1597
Male Open Standard Loss	2.2 GΩ/s

Female Open Standard Specifications

Female Open Frequency Range	DC to 6 GHz
Female Open Electrical Delay	29.243 ps
Female Open C0 (10 ⁻¹⁵ F)	49.43
Female Open C1 (10 ⁻²⁷ F/Hz)	-310.1
Female Open C2 (10 ⁻³⁶ F/Hz ²)	23.17
Female Open C3 (10 ⁻⁴⁵ F/Hz ³)	-0.1597
Female Open Standard Loss	2.2 GΩ/s

Male Short Standard Specifications

Male Short Frequency Range	DC to 6 GHz
Male Short Electrical Delay	31.785 ps
Male Short L0 (10 ⁻¹² H)	0
Male Short L1 (10 ⁻²⁴ H/Hz)	0
Male Short L2 (10 ⁻³³ H/Hz ²)	0
Male Short L3 (10 ⁻⁴² H/Hz ³)	0
Male Short Standard Loss	2.3 GΩ/s

Female Short Standard Specifications

Female Short Frequency Range	DC to 6 GHz
Female Short Electrical Delay	31.785 ps
Female Short L0 (10 ⁻¹² H)	0
Female Short L1 (10 ⁻²⁴ H/Hz)	0
Female Short L2 (10 ⁻³³ H/Hz ²)	0
Female Short L3 (10 ⁻⁴² H/Hz ³)	0
Female Short Standard Loss	2.3 GΩ/s

Male Broadband Load Standard Specifications

Male Load Frequency Range	DC to 6 GHz
Male Load Return Loss (DC to 3 GHz)	≥ 40 dB
Male Load Return Loss (3 to 6 GHz)	≥ 35 dB
Male Load DC Resistance	50 Ω

Female Broadband Load Standard Specifications

Female Load Frequency Range	DC to 6 GHz
Female Load Return Loss (3 to 6 GHz)	≥ 38 dB
Female Load DC Resistance	50 Ω

Mechanical & Connector Specifications

Connector Pin Depth Limits (Male 3.5 mm)	0.0 to 0.003 inch
Connector Pin Depth Limits (Female 3.5 mm)	0.0 to 0.003 inch

Environmental & Calibration Traceability

Calibration Reference Temperature Range	20 °C to 26 °C
Storage Temperature Range	-40 °C to +75 °C

Kit Contents & Physical Properties

Included Male Standards	3.5 mm (m) Open, 3.5 mm (m) Short, 3.5 mm (m) 50 Ω Termination
Included Female Standards	3.5 mm (f) Open, 3.5 mm (f) Short, 3.5 mm (f) 50 Ω Termination
Protective Carrying Case	Included

Connector Specifications

Recommended Coupling Torque	0.9 N-m (8 in-lb)
Torque Wrench Spanning Size	8 mm (5/16 in)

General

Recommended Calibration Cycle	12 months
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TECHNOLOGY

RF/Microwave Calibration

APPLICATIONS

Vector Network Analyzer (VNA) Calibration

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