

# Keysight 85059B

## Precision Calibration Kit, 1.0 mm

### Data Sheet

The Keysight 85059B is a 1.0 mm calibration/verification kit designed for vector network analyzer systems operating over the frequency range of DC to 120 GHz. The opens, shorts and loads in this kit were optimized to provide accurate calibrations over the specified frequency range.

### Electrical Specifications for 1.0 mm 50 ohm Devices

Device	Frequency (GHz)	Parameter	
<b>Data-Based Model</b>		<b>Deviation from Nominal Phase Degrees</b>	
Short 1, 2, 3, & 4 male and female	DC to 20	1.50	
	20 - 50	2.30	
	50 - 80	3.25	
	80 - 100	3.50	
	100 - 120	4.00	
Open male and female	DC to 20	2	
	20 - 50	3	
	50 - 80	7	
	80 - 100	8	
	100 - 120	8	
<b>Data-Based Model</b>		<b>Return Loss (dB)</b>	
Load male and female	DC to 18	30	
	18 - 40	26	
	40 - 50	24	
Device	Frequency (GHz)	Parameter	
<b>Data-Based Model</b>		<b>Return Loss (dB)</b>	<b>Insertion Loss (dB)</b>
Adapters	DC to 110	14	-0.5
	110 - 120	14	-0.7



## Replaceable Parts

Description	Qty Per Kit	Keysight Part Number
<b>Calibration Devices (1.0 mm)</b>		
1.3 mm offset short 1 male	1	85059-60027
2.45 mm offset short 2 male	1	85059-60029
3.326 mm offset short 3 male	1	85059-60031
4.039 mm offset short 4 male	1	85059-60033
1.3 mm offset short 1 female	1	85059-60028
2.45 mm offset short 2 female	1	85059-60030
3.326 mm offset short 3 female	1	85059-60032
4.039 mm offset short 4 female	1	85059-60034
Offset open male	1	85059-60053
Offset open female	1	85059-60054
Lowband load male	1	85059-60019
Lowband load female	1	85059-60020
<b>Adapters (1.0 mm)</b>		
Adapter male-male	1	85059-60044
Adapter female-female	1	85059-60045
Adapter male-female	1	85059-60046
<b>Calibration Kit Storage Case</b>		
Box with customized foam inserts	1	1540-2330
<b>Wrenches</b>		
6 mm open-end wrench	1	8710-2156
6 mm, 45 N-cm (4 in-lb) torque wrench	1	8710-2812
14 mm, 45 N-cm (4 in-lb) torque wrench	1	8710-2813
<b>Miscellaneous Items</b>		
Operations and Service Guide	1	85059-90005
10x Magnifying Glass	1	1000-1114
Protective end caps	as required	1401-0202