

# DW97045/6 8GHz Calibration kits

## Data Sheet



Precision 3.5mm calibration kits for use with the LA19-13-03 Vector Network Analyser. The kits use Rosenberger Standards and include measured data for enhanced precision including typical directivity after calibration of 50 dB.

### DW97046 Male Kit

Device	Specification	Frequency (GHz)
<b>Load model</b> Uncorrected return loss Corrected return loss <sup>1</sup>	03S150-C10S3 ≥ 40 dB ≥ 30 dB ≥ 46 dB	≤ 4 > 4 ≤ 8
<b>Open Circuit model</b> Offset delay Offset loss Return loss Error from nominal phase Open end capacitance values C0 (x10 <sup>-15</sup> F), C1 (x10 <sup>-27</sup> F) C2(x10 <sup>-36</sup> F), C3(x10 <sup>-45</sup> F)	03S12L-000S3 23.3495 ps 2.2 GΩ/s ≤ 0.1 dB ≤ 0.2 dB ≤ 1.2° ≤ 2° Values provided with every kit	≤ 4 > 4 ≤ 4 > 4
<b>Short Circuit model</b> Offset delay Offset loss Inductance Return loss Error from nominal phase	03S12S-000S3 26.0264 ps 2.36 GΩ/s 0.0 pH ≤ 0.1 dB ≤ 0.1 5dB ≤ 1.2° ≤ 2°	≤ 4 > 4 ≤ 4 > 4
<b>Male to Male adaptor model</b> Delay Loss Return loss	03S121-S20S3 84.0854 ps 2.51 GΩ/s ≥ 34 dB ≥ 30 dB	≤ 4 > 4

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## Data Sheet (continued)

### DW97045 Female Kit

Device	Specification	Frequency (GHz)
<b>Load model</b>	03K150-C10S3	
Uncorrected return loss	≥ 40 dB	≤ 4
	≥ 30 dB	> 4
Corrected return loss <sup>1</sup>	≥ 46 dB	≤ 8
<b>Open Circuit model</b>	03K12L-000S3	
Offset delay	23.3495 ps	
Offset loss	2.2 GΩ/s	
Return loss	≤ 0.1 dB	≤ 4
	≤ 0.2 dB	> 4
Error from nominal phase	≤ 1.2°	≤ 4
	≤ 2°	> 4
Open end capacitance values C0 (x10 <sup>-15</sup> F), C1( x10 <sup>-27</sup> F) C2(X10 <sup>-36</sup> F), C3(x10 <sup>-45</sup> F)	Values provided with every kit	
<b>Short Circuit model</b>	03K12S-000S3	
Offset delay	26.0264 ps	
Offset loss	2.36 GΩ/s	
Inductance	0.0 pH	
Return loss	≤ 0.1 dB	≤ 4
	≤ 0.15 dB	> 4
Error from nominal phase	≤ 1.2°	≤ 4
	≤ 2°	> 4
<b>Male to Male adaptor model</b>	03K121-K20S3	
Delay	84.0854 ps	
Loss	2.51 GΩ/s	
Return loss	≥ 34 dB	≤ 4
	≥ 30 dB	> 4

**Notes:** 1. Inferred from directivity after applying correction using measured data provided with kit

### Kit Options

**Option 1:** Cost reduction, replaces Rosenberger load with economy 3.5 mm load and data. Corrected return loss guaranteed ≥ 40 dB

**Option 2:** Single box, both kits supplied in a single wooden box