

3.5mm / SMA Male VNA calibration kit, 6 GHz

1 Introduction

The TBVC-SM6 is a 3.5mm/SMA compatible calibration kit for Vector Network Analyzers. It contains an Open, Short, Load and a Through. It is used for OSLT calibration in the frequency range DC-6GHz.



Picture 1: TBVC-SM6

2 Specification

Load:

3.5mm-Male
 $Z = 50 \Omega$
Return loss > 30 dB

Short:

3.5mm-Male
 $Z = 50 \Omega$
Delay = 46.544 ps
Loss = 6.18 GΩ/s
 $L_0 = 1.84 \text{ pH}$
 $L_1 = -3.0297\text{e-}21 \text{ H/Hz}$
 $L_2 = -3.123\text{e-}31 \text{ H/Hz}^2$
 $L_3 = 5.38\text{e-}42 \text{ H/Hz}^3$

THROUGH:

3.5mm-Male
 $Z = 50 \Omega$
Loss = 6.3 GΩ/s
Delay = 75.345 ps

Open:

3.5mm-Male
 $Z = 50 \Omega$
Delay = 46.485 ps
Loss = 8.46 GΩ/s
 $C_0 = -6.03 \text{ fF}$
 $C_1 = 5.16\text{e-}25 \text{ F/Hz}$
 $C_2 = 4.13\text{e-}35 \text{ F/Hz}^2$
 $C_3 = 3.36\text{e-}45 \text{ F/Hz}^3$

Frequency range: DC – 6 GHz
Box dimensions: 145 mm x 145 mm x 55 mm
Weight: 340 g

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The calibration kit file is pre-installed with our TBVNA-6000 software and can be downloaded separately from our website.

3 Ordering Information

Part Number	Description
TBVC-SM6	3.5mm / SMA - Male OSLT VNA calibration kit, 6 GHz

4 History

Version	Date	Author	Changes
V 1.0	2.5.2025	Mayerhofer	Creation
V1.1	21.7.2025	Mayerhofer	Typo correction 2,5mm->3.5mm