

**Technical Data Sheet**

# TOSLK50A-40 Calibration Kit

Type K(f)  
DC to 40 GHz, 50  $\Omega$



This calibration kit has been designed to provide superior measurement results when used with precision instruments. It is designed for use in both field and lab environments. It is a high precision component and should be handled with proper care. Excessive shock, torque, or power should be avoided to prevent permanent damage.

Specifications for units within recommended calibration cycle are guaranteed under the following conditions:

1. Unit is operated within specified temperature range.
2. Unit has not been subjected to damage from mishandling.

Length, capacitance, and inductance are nominal values.

Through Return Loss and Insertion Loss and DC Resistance specifications are typical. Phase is measured as a deviation from the model defined by offset length and inductance or capacitance.

<b>Operating Temperature Range</b>	-10 °C to +55 °C (MIL-PRF-28800F, Class 2)
<b>Storage Temperature Range</b>	-51 °C to +71 °C (MIL-PRF-28800F, Class 2)
<b>Recommended Calibration Interval</b>	1 year

### Calibration Options

- TOSLK-0098 Standard Calibration to ISO17025 and ANSI/NCSS Z540-1. Includes calibration certificate.
- TOSLK-0099 Premium Calibration to ISO17025 and ANSI/NCSS Z540-1. Includes calibration certificate, test report, and uncertainty data.

For the latest information, sales, or service, visit: [www.anritsu.com](http://www.anritsu.com)

TOSLK50A-40 Calibration Kit TDS  
Copyright December 2021 Anritsu Company, USA  
All Rights Reserved

© Anritsu All trademarks are registered trademarks of their respective companies. Data subject to change without notice. Anritsu prints on recycled paper with vegetable soybean oil ink.



11410-00744



D

# TOSLKF50A-40 Calibration Kit Specifications

Through (Thru)	Spec
Length	16.07 mm
Return Loss (DC to 10 GHz)	$\geq 34$ dB
Return Loss (10 to 20 GHz)	$\geq 32$ dB
Return Loss (20 to 30 GHz)	$\geq 30$ dB
Return Loss (30 to 40 GHz)	$\geq 30$ dB
Insertion Loss (DC to 40 GHz)	$\leq 0.025 \times \sqrt{(f/\text{GHz})}$ dB

Open	Spec
Length	5.01 mm
C0 (1E-15) F	5.000
C1 (1E-27) F/Hz	0.000
C2 (1E-36) F/Hz <sup>2</sup>	1.500
C3 (1E-45) F/Hz <sup>3</sup>	0.100
Phase (DC to 10 GHz)	$\leq \pm 1.5^\circ$
Phase (10 to 20 GHz)	$\leq \pm 3.0^\circ$
Phase (20 to 30 GHz)	$\leq \pm 4.5^\circ$
Phase (30 to 40 GHz)	$\leq \pm 6.0^\circ$

Short	Spec
Length	5.01 mm
L0 (1E-12) H	8.000
L1 (1E-24) H/Hz	-995.000
L2 (1E-33) H/Hz <sup>2</sup>	33.000
L3 (1E-42) H/Hz <sup>3</sup>	-0.290
Phase (DC to 10 GHz)	$\leq \pm 1.5^\circ$
Phase (10 to 20 GHz)	$\leq \pm 2.5^\circ$
Phase (20 to 30 GHz)	$\leq \pm 4.0^\circ$
Phase (30 to 40 GHz)	$\leq \pm 5.5^\circ$

Load	Spec
DC Resistance	$50 \Omega \pm 0.25 \Omega$
Return Loss (DC to 10 GHz)	$\geq 42$ dB
Return Loss (10 to 20 GHz)	$\geq 36$ dB
Return Loss (20 to 30 GHz)	$\geq 32$ dB
Return Loss (30 to 40 GHz)	$\geq 30$ dB
Max Power	0.5 W