

3.5mm Connector Fixed Termination Calibration Kits

For Tektronix TDR and Electrical Sampling Modules

Features

- ▶ 3.5mm Connectors
- ▶ DC to 26.5 GHz
- ▶ In-Series Phase Matched Adapters are Available
- ▶ Fixed Load Calibration

Description

These 3.5mm calibration kits are designed for use with Tektronix TDR and Electrical Sampling Modules equipped with 3.5mm connectors from DC to 26.5 GHz.

Each kit includes a full complement of fixed load calibration standards (shorts, opens and fixed loads) and comes housed in an attractive foam-lined wood instrument case.

3.5mm Connector Description

3.5mm connectors are air interface connectors that are fully compliant with IEEE 257 (GPC 3.5) specifications, and are mating compatible with SMA and 2.92mm (K) connectors. They have an air line size of 0.0598 (inner conductor diameter) and 0.1378 (outer conductor diameter). For interface specifications see Maury data sheet 5E-062.

Recommended Accessories

- A050A Digital connector gage kit (thread-on type)
- 8799A1 Torque wrench, 5/16-inch (8 in. lbs)
- 8021C2 3.5mm Female to Male Connector Saver
- 8042D 3.5mm Bead Supported Air Line, 10cm (DC – 18.0 GHz)
- 8043S10 3.5mm Beadless Air Line, 10cm (18.0 – 26.5 GHz*)

* Note: Use two (2) 8021C2 adapters for converting the 8043S10 Beadless Air Line to a Bead Supported configuration.

Ordering Options

MODEL	ADAPTER SET	SET CONTENTS
8050TK	NONE	NONE
8050TK10	8050Z1	See page 2

Note: 2.92mm (K) and 3.5mm connectors are fully mateable. Resulting junctions are calibrated out and are not critical.



8050TK

Components Included in 8050TK Kits

QUANTITY	DESCRIPTION	MODEL
1	3.5mm female fixed offset short	8046F
1	3.5mm male fixed offset short	8047F
1	3.5mm female open	8048A1
1	3.5mm male open	8048B1
1	3.5mm female fixed termination	8031A4
1	3/5mm male fixed termination	8031B4
1	Instrument case	—

Note: Each kit is available with a set of adapters per the Ordering Options (at left).

See page 2 for component specifications.

Single sex kits are also available.

Please contact our Sales Department for details
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COMPONENT SPECIFICATIONS

The Maury precision 3.5mm components included in these kits or recommended as accessories have the following specifications:

Bead Supported Air Line – Model 8042D

Frequency Range DC to 18.0 GHz
 Electrical Length 9.993cm
 Electrical Length Accuracy ±0.02cm
 VSWR 1.0004 + 0.0035f (GHz)
 Nominal Impedance 50 ohm

Beadless Air Line – Model 8043S10

Frequency Range DC to 26.5 GHz
 Electrical Length 9.993cm
 Electrical Length Accuracy ±0.0025cm
 Minimum Return Loss
 (excluding connector interface) 48 dB
 Nominal Impedance 50 ohm

Fixed Offset Shorts – Models 8046F & 8047F

Frequency Range DC to 26.5 GHz
 Minimum Reflection Coefficient 0.98
 Offset Length 0.197 in. (0.500cm)
 Phase Accuracy ±2.0 degrees
 Nominal Impedance 50 ohm

Open Circuits – Models 8048A1 & 8048B1

Frequency Range DC to 26.5 GHz
 Minimum Reflection Coefficient 0.98
 Phase Accuracy ± 1.4 degrees
 Nominal Impedance 50 ohm

Fixed Terminations – Models 8031A4 & 8031B4

Frequency Range DC to 26.5 GHz
 Maximum VSWR:
 DC to 2.0 GHz 1.03
 2.0 to 4.0 GHz 1.05
 4.0 to 18.0 GHz 1.10
 18.0 to 26.5 GHz 1.15
 Power Handling 0.25 watt CW, 0.5 kW peak
 Nominal Impedance 50 ohm

ADAPTERS & ADAPTER SET OPTIONS

Precision 3.5mm Adapters

Models 8021A2/B2/C2

Frequency Range DC to 34.0 GHz
 Maximum VSWR:
 DC to 18.0 GHz 1.05
 18.0 to 26.5 GHz 1.08
 26.5 to 34.0 GHz 1.12
 Nominal Impedance 50 ohm

Adapters Included in 8050Z1 Sets

TEST PORT ADAPTER OPTION	QUANTITY	DESCRIPTION	MODEL
1	1	3.5mm female to 3.5mm female	8021A2
1	1	3.5mm male to 3.5mm male	8021B2
1	1	3.5mm female to 3.5mm male	8021C2