

## 16191A Side Electrode SMD Test Fixture



**Terminal Connector:** 7 mm

**DUT Connection:** 2-Terminal

**Electrical Length:** 14 mm

**Dimensions (approx.):** 150(W) x 70(H) x 110(D) [mm]

**Weight (approx.):** 500 g

**Additional Error:**

Type of Error	Impedance
Proportional Error	$1.5 \times f^2$ [%]
Open Repeatability	$2 + 30 \times f$ [ $\mu$ S]
Short Repeatability	$30 + 250 \times f$ [m $\Omega$ ]

f: [GHz]

**Description:** This test fixture is designed for impedance evaluations of side electrode SMD. The minimum SMD size that this fixture is adapted to evaluate is 2 (L) [mm].

**Applicable Instrument:** 4287A, 4294A + 42942A, 4395A with Opt.4395A-010 + 43961A, 4396B with Opt.4396B-010 + 43961A, E4991A, (4195A + 41951A, 4286A, 4291A, 4396A)\*

When used with 16085B: 4263B, 4268A, 4279A, 4284A, 4285A, 4288A, (4192A, 4194A, 4263A, 4278A)\*

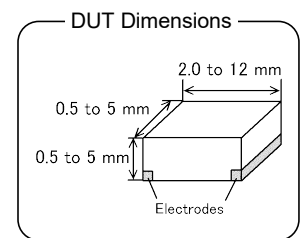
\* denotes the instrument is obsolete.

**Frequency:** DC to 2 GHz

**Maximum Voltage:**  $\pm 40$  V peak max (AC +DC)

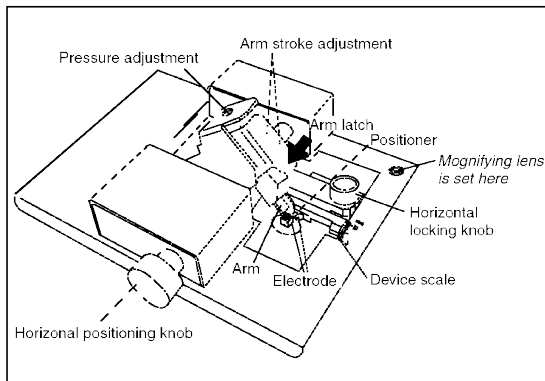
**Operating Temperature:** -55°C to +85°C

**DUT size:** 2.0 to 12 mm (length)



### Furnished Accessories:

Description	P/N	Qty.	Option
Wrench	8710-1181	1	Standard
Operation and Service Manual	16191-90010	1	Standard
<b>General Sized</b>			
Shorting Device (1 × 1 × 2.4 (mm))	16191-29001	1	16191A-701
Shorting Device (1.6 × 2.4 × 2 (mm))	16191-29002	1	16191A-701
Shorting Device (2.4 × 2.4 × 3.2 (mm))	16191-29003	1	16191A-701
Shorting Device (2.4 × 2.4 × 4.5 (mm))	16191-29004	1	16191A-701
<b>EIA/EIAJ Industrial Standard Sized</b>			
Shorting Device (1 × 0.5 × 0.5 (mm))	16191-29005	1	16191A-010
Shorting Device (1.6 × 0.8 × 0.8 (mm))	16191-29006	1	16191A-010
Shorting Device (2.0 × 1.2 × 0.8 (mm))	16191-29007	1	16191A-010
Shorting Device (3.2 × 1.6 × 0.8 (mm))	16191-29008	1	16191A-010
Case for Shorting Devices	1540-0692	1	16191A-010/701
Magnifying Lens	16193-60002	1	16191A-710
Tweezers	8710-2081	1	16191A-710



Test fixture overview

**Options:**

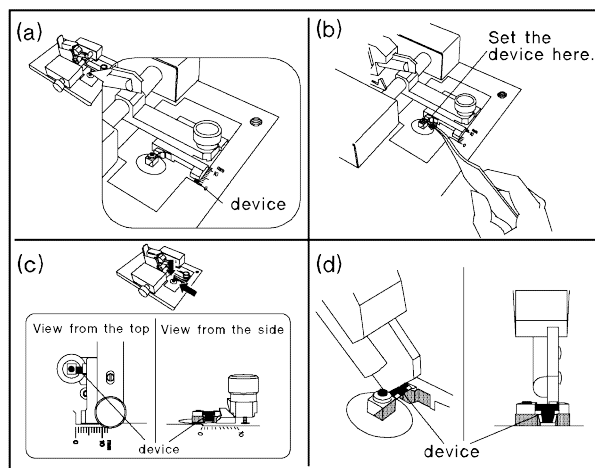
16191A-010: Add EIA/EIAJ industrial standard sized shorting bar set

16191A-701: Add general sized shorting bar set

16191A-710: Add the magnifying lens and tweezers

**Compensation and Measurement:** Open and short compensations are recommended in combination with the electrical length compensation before measurement. The fixture's electrical length must be entered into the electrical length compensation function of the measurement instrument first. Then open compensation is performed by separating the high and the low electrodes from each other. The separation should be equivalent in size to the DUT's width. Short compensation is performed by using option 16191A-010/701 shorting bar set. After performing open and short compensations in combination with the electrical length compensation, the DUT is inserted into the test fixture. The following figures show how measurement is performed.

- a) Set the device within the device scale and adjust the positioner.
- b) Place the device on the electrode.
- c) Adjust the horizontal positioning knob and tighten the horizontal locking knob.
- d) Latch off the pressure arm and turn down the arm. Measure the device.



Positioning the device