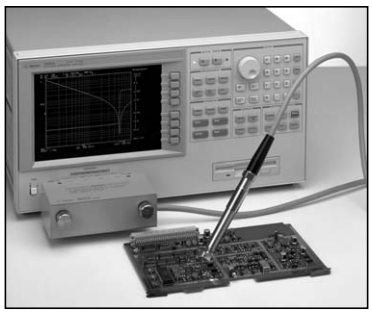
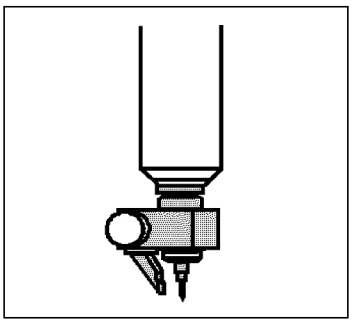
42941A Impedance Probe Kit

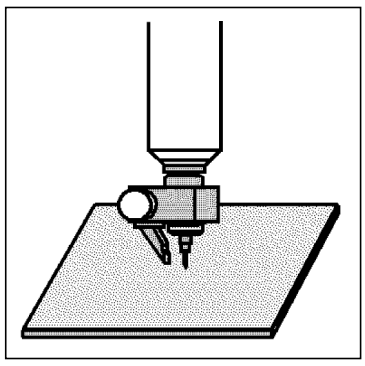
Terminal Connector: 4-Terminal Pair, BNC
Cable Length (approx.): 1.5 m
Weight (approx.): 2400 g
Basic Measurement Accuracy: ±1%
For detailed information, refer to the operation manual or the specifications of 4294A.



4294A with 42941A



Open compensation

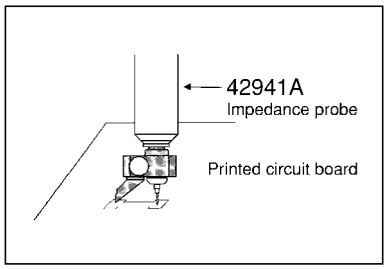


Short compensation

Description: This impedance probe kit is designed for use with the 4294A. It provides the capability to perform in-circuit measurements (printed circuit patterns, the input/output impedance of circuits, etc.) with better accuracy and wider impedance coverage from 40 Hz to 110 MHz. DUTs can be connected by either using the standard probe, the alligator clip adapter or the BNC adapter. The standard probe is best for in-circuit, board-mounted components. The alligator clip is for components too large for the standard probe tip. The BNC adapter is used to connect circuits or networks equipped with BNC connectors.
Applicable Instrument: 4294A
Frequency: 40 Hz to 110 MHz
Maximum Voltage: ±42 V peak max (AC+DC)
Operating Temperature: -20°C to +75°C (probe only)
Furnished Accessories:

Description	P/N	Qty.
Pin Probe	42941-60002	1
Adapter BNC-SMB	1253-0476	1
Spare Pin Set (3 ea.)	42941-60004	1
3.5 mm SHORT	1250-2840	1
3.5 mm LOAD	0955-1105	1
Clip lead	8121-0003	1
Ground lead	04193-61629	1
Carrying case	42941-60011	1
Operation and Service Manual	42941-90010	1

Compensation and Measurement: Adapter setup and compensation is required before measurement. In the Adapter setup menu, select PROBE 42941A. Use the furnished 3.5 mm short and load standards. The open condition can be created by not connecting the probe to anything. Perform phase compensation, short and load data measurements. For compensation, open and short compensation is recommended. Short compensation is performed by shorting the probe. To short the probe it is recommended to use a shorting device with gold-plated surfacing (which provides stable contact resistance).



In-circuit measurement