Agilent U2941A
Parametric Test Fixture

Data Sheet

The Agilent U2941A parametric test fixture is designed to complement usage of the Agilent U2722A USB modular source measure unit in the testing of semiconductor components, including SMT and DIP ICs.

The bundled Agilent Parametric Measurement Manager software also supports the Agilent U2751A USB modular switch matrix when used with the U2722A.

Features

- Closed lid minimizes ESD on sensitive circuits and components

- Up to 3 source/measure channels supported

- Different socket modules to match a wide variety of pin configurations

- Assembly PTFE plate for low-current measurements

- Bundled Agilent Parametric Measurement Manager software eases set-up, testing and data recording
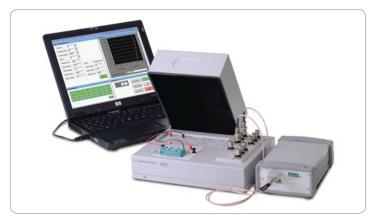
Figure 1. Sample setup of the U2941A connected directly to the U2722A source measure unit, and fastened with the DIP socket module.
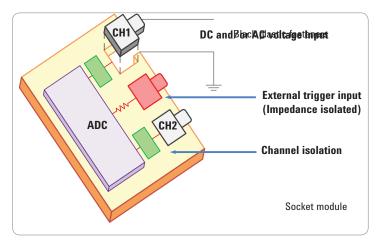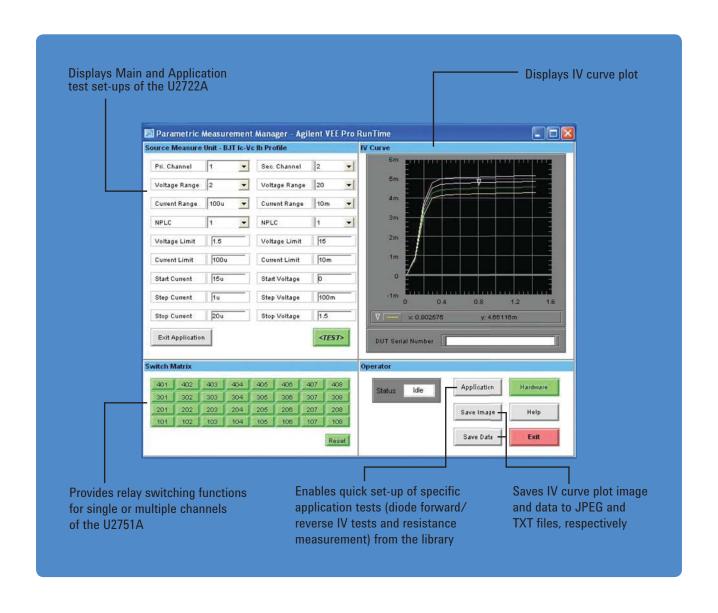
CH1

DC and bias AC voltage input

External trigger input (Impedance isolated)

ADC

CH2

Channel isolation

Socket module

Figure 2. Socket modules are interchangeable to match pin configuration of device-under-test (DUT).

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Features of the Agilent Parametric Measurement Manager software

The Agilent Parametric Measurement Manager software comes bundled with the U2941A parametric test fixture. The software helps kick start tasks sooner with the below features:

• Out-of-box configuration of instruments for easy set-up

• User-friendly graphical user interface

• IV curve plotting with various graph tools, including autoscale, zoom and markers

• Saving of IV curve data to text file format

• Saving of IV curve graph to JPEG file format

• Print graph function

Displays Main and Application test set-ups of the U2722A

Displays IV curve plot

Provides relay switching functions for single or multiple channels of the U2751A

Enables quick set-up of specific application tests (diode forward/ reverse IV tests and resistance measurement) from the library

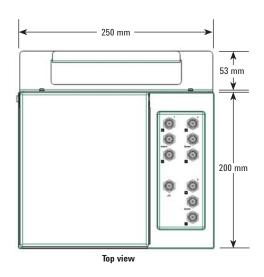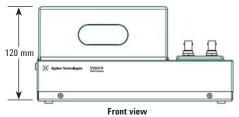Saves IV curve plot image and data to JPEG and TXT files, respectively

Specifications and system requirements

Specifications

The following specifications are valid for 23 °C ±5 °C and <70% relative humidity.

Electrical specifications	
Voltage rating	60 VDC
Current rating	1 A
Environmental specifications	
Operating temperature	0 °C to 50 °C
Storage temperature	−20 °C to 70 °C
Operating humidity	20% to 85% RH non-condensing
Storage humidity	5% to 90% RH non-condensing
Altitude	Up to 2000 m
Physical specifications	
Dimensions (WxDxH)	250 mm × 200 mm × 120 mm
Weight	1.33 kg (approx.)
Warranty	3 months

250 mm

53 mm

200 mm

Top view

120 mm

Front view

Minimum system requirements

Hardware	
Processor	1.6 GHz Pentium® IV or higher
RAM	512 MB (1.0 GB or higher recommended)
Hard disk space	1.0 GB free disk space at runtime
Display resolution	1024 × 768 recommended
Operating system and browser	
Operating system	• Windows® XP Professional or Home Edition, Service Pack 1 or later; or • Windows 2000 Professional, Service Pack 4 or later
Browser	Microsoft Internet Explorer 5.01 (6.0 or higher recommended)
Software	
Agilent IO Libraries Suite [1]	Version 15.0 or higher
Agilent VEE [2]	Runtime version 8.5, patch 8.5.1
Agilent Measurement Manager [3]	Version 1.6 or higher
Microsoft .NET Framework [1]	Version 1.1 and 2.0

1. Available on Agilent Automation-Ready CD
2. Bundled with Agilent Parametric Measurement Manager CD
3. Bundled with Agilent U2722A USB modular source measure unit or Agilent U2751A USB modular switch matrix

Ordering information

Parametric test fixture	
U2941A	Items shipped as standard with parametric test fixture: • Assembly PTFE plate • 28-pin dual-in-line package (DIP) socket module • 0.1-inch universal socket module • 0.075-inch universal socket module • 0.05-inch universal socket module • Pin plug-to-pin plug cables, black (4 pcs) • Pin plug-to-pin plug cables, red (4 pcs) • Pin plug-to-pin plug cables, blue (4 pcs) • Pin plug-to-miniature clip cables, black (4 pcs) • Pin plug-to-miniature clip cables, red (4 pcs) • Pin plug-to-miniature clip cables, blue (4 pcs) • PCB jumper pin • BNC to two-wire cable, 1 m (3 pcs) • Agilent Parametric Measurement Manager CD (includes installation and operating guides)

Socket modules	
U2941A-201	Assembly PTFE plate • Insulation board with minimal leakage current: suitable for extremely low-current measurements.
U2941A-202	28-pin dual-in-line package (DIP) socket module • Lever actuated zero insertion force (ZIF) socket
U2941A-203	0.1-inch universal socket module • 0.1-inch pitch: suitable for virtually any device such as components, DIP IC, or small scale circuit
U2941A-204	0.075-inch universal socket module • 0.075-inch pitch: suitable for virtually any device such as components, DIP IC, or small scale circuit
U2941A-205	0.05-inch universal socket module • 0.05-inch pitch: suitable for virtually any device such as components, DIP IC, or small scale circuit

Cables	
U2941A-101	Pin plug-to-pin plug cable, black
U2941A-102	Pin plug-to-pin plug cable, red
U2941A-103	Pin plug-to-pin plug cable, blue
U2941A-104	Pin plug-to-miniature clip cable, black
U2941A-105	Pin plug-to-miniature clip cable, red
U2941A-106	Pin plug-to-miniature clip cable, blue
U2941A-107	BNC to two-wire cable, 1 m

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