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# Introduction

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

The bundled Keysight Parametric Measurement Manager software also supports the Keysight 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 Keysight 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.

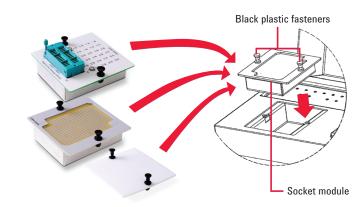


Figure 2. Socket modules are interchangeable to match pin configuration of device-under-test (DUT).

## Features of the Keysight Parametric Measurement Manager Software

The Keysight 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

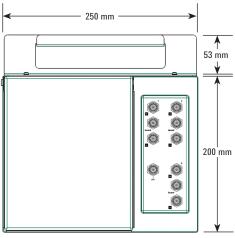
Displays Main and Application test set-ups of the U2722A	Displays IV curve plot
Parametric Measurement Manager - Keysight VEE Pr     Source Measure Unit - BJT Ic-Vc Ib Profile	) Run Time
Pri. Channel 1 💌 Seo. Channel 2 💌	
Voltage Range 2 💌 Voltage Range 20 💌	5m
Current Range 100u 💌 Current Range 10m 💌	4m
NPLC 1 NPLC 1	
Voltage Limit 15	2m
Current Limit 100u Current Limit 10m	
Start Current 15u Start Voltage 0	
Step Current 10 Step Voltage 100m	-1m Amhananananananananananananananananananan
Stop Current 20u Stop Voltage 1.5	▼
Exit Application <7EST>	DUT Senal Number
Switch Matrix	Operator
401 402 403 404 405 406 407 408	Status Idle Application Hardware
301 302 303 304 305 306 307 308 201 202 203 204 205 206 207 208	Save Image Help
101 102 103 104 105 106 107 108	Jave Image
Reset	Save Data
	ck set-up of specific Saves IV curve plot image and data to JPEG and
0 1	tests (diode forward/ and data to JPEG and ests and resistance TXT files, respectively
	nt) from the library

# Specifications and System Requirements

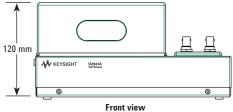
## Specifications

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

urrent rating 1 A nvironmental specifications perating temperature 0° torage temperature –20 perating humidity 209 torage humidity 5%	0 VDC A °C to 50 °C 20 °C to 70 °C
nvironmental specifications perating temperature 0° torage temperature -20 perating humidity 209 torage humidity 5%	°C to 50 °C
perating temperature0 °torage temperature-20perating humidity209torage humidity5%	
torage temperature     -20       perating humidity     209       torage humidity     5%	
perating humidity 209 torage humidity 5%	20 °C to 70 °C
torage humidity 5%	20 01070 0
5 7	0% to 85% RH non-condensing
ltitude	% to 90% RH non-condensing
uuuu 0p	p to 2000 m
hysical specifications	
imensions (WxDxH) 250	50 mm × 200 mm × 120 mm
Veight 1.3	33 kg (approx.)
Varranty 3 n	months



Top 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	<ul> <li>Windows XP Professional or Home Edition, Service Pack</li> <li>1 or later; or</li> </ul>	
	<ul> <li>Windows 2000 Professional, Service Pack 4 or later</li> </ul>	
Browser	Microsoft Internet Explorer 5.01 (6.0 or higher recommended)	
Software		
Keysight IO Libraries Suite <sup>1</sup>	Version 15.0 or higher	
Keysight VEE <sup>2</sup>	Runtime version 8.5, patch 8.5.1	
Keysight Measurement Manager <sup>3</sup>	Version 1.6 or higher	
Microsoft .NET Framework <sup>1</sup>	Version 1.1 and 2.0	

1. Available on Keysight Automation-Ready CD

2. Bundled with Keysight Parametric Measurement Manager CD

3. Bundled with Keysight U2722A USB modular source measure unit or Keysight U2751A USB modular switch matrix

# Ordering Information

Parametric test fixture	)
U2941A	<ul> <li>Items shipped as standard with parametric test fixture:</li> <li>Assembly PTFE plate</li> <li>28-pin dual-in-line package (DIP) socket module</li> <li>0.1-inch universal socket module</li> <li>0.075-inch universal socket module</li> <li>0.05-inch universal socket module</li> <li>Pin plug-to-pin plug cables, black (4 pcs)</li> <li>Pin plug-to-pin plug cables, red (4 pcs)</li> <li>Pin plug-to-pin plug cables, black (4 pcs)</li> <li>Pin plug-to-miniature clip cables, black (4 pcs)</li> <li>Pin plug-to-miniature clip cables, red (4 pcs)</li> <li>Pin plug-to-miniature clip cables, blue (4 pcs)</li> <li>PCB jumper pin</li> <li>BNC to two-wire cable, 1 m (3 pcs)</li> <li>Keysight Parametric Measurement Manager CD (includes installation and operating guides)</li> </ul>
Socket modules	
U2941A-201	<ul> <li>Assembly PTFE plate</li> <li>Insulation board with minimal leakage current: suitable for extremely low-current measurements.</li> </ul>
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	<ul> <li>0.075-inch universal socket module</li> <li>0.075-inch pitch: suitable for virtually any device such as components, DIP IC, or small scale circuit</li> </ul>
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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www.keysight.com/find/u2941a

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