

8000 Series EOS/ESD Protection Module

► 80A02



The **80A02 EOS/ESD Protection Module** protects the sampling bridge of Tektronix electrical sampling module inputs from damage due to electro-overstress (EOS) and electro-static discharge (ESD) from circuit boards and cables. The 80A02 is intended for use in applications such as electrical TDR circuit board testing and cable testing where large static charges can be stored in the DUT.

The 80A02 plugs into any available electrical sampling module plug-in slot of the TDS/CSA8000 Series, legacy CSA11K Series or legacy CSA803 Series sampling oscilloscopes.

The 80A02 provides a front panel SMA connector for connecting the SMA test cable or probe signal from the DUT. The 80A02 passes the acquired DUT signal to

a connected electrical sampling module input for measurement after an actuating control (from the matching P80318 or P8018 high-performance probe, or customer-provided external switch, TTL or CMOS control logic input), which signals the 80A02 that the DUT has been grounded to discharge any electro-static charge remaining in the DUT.

When used with either matching P80318 or P8018 20 GHz handheld probe (with probe tip pressure actuating feature), the 80A02 provides a superior technique and performance capability for electrical sampling module EOS/ESD protection of acquired electrical signal and TDR measurement. (See P80318 or P8018 product description.)

► Features & Benefits

Single-channel Electro-static Discharge (ESD) and Electro-overstress (EOS) Damage Protection for Tektronix Electrical Sampling Modules

Plugs Into and Is Powered from Sampling Mainframe

Compatible with Tektronix Extender Cables

<37 ps Reflected Rise Time when Used with 80E04 or SD24 Electrical Sampling TDR Modules

► Applications

Electrical Sampling Module Input Protection for High-speed Electrical Signal Analysis

Circuit Board Controlled Impedance Testing (TDR)

8000 Series EOS/ESD Protection Module

► 80A02

► Characteristics

Bandwidth – >25 GHz.

Applicable Mainframes –

TDS8000 Series, CSA8000 Series,
CSA11800 Series, CSA803 Series.

Connector Type – SMA female.

Manual Control Input –

Open circuit for DUT discharging standby state.
Closed circuit (<100 k Ω to ground) for
measurement.

Automated Control Input –

Open circuit or logic low (<0.3 V)
for DUT discharging.

Closed circuit or logic high (>1.0 V)
for measurement.

Control Signal Connector –

Audio stereo phone mini-jack.

Switching Time – 20 ms (typical).

► Ordering Information

80A02

EOS/ESD Protection Module, Single-Channel.

Includes: User manual, 1 – SMA 50 Ω termination
cap, 1 to 12 inch length 20 GHz SMA cable.

Replaceable Items

015-1022-01 – SMA 50 Ω termination.

174-4878-00 – 20 GHz SMA cable
(12-Inch length).

Accessories

SlotSaver Adapter Extender Cable – Brings
power and control to the 80A02 when operated
externally from the TDS/CSA mainframe, saving
slot space (compatible with 80A06 and 80A02).
Order 174-5230-00.

Contact Tektronix:

ASEAN / Australasia (65) 6356 3900

Austria +41 52 675 3777

Balkan, Israel, South Africa and other ISE Countries +41 52 675 3777

Belgium 07 81 60166

Brazil & South America 55 (11) 3741-8360

Canada 1 (800) 661-5625

Central East Europe, Ukraine and the Baltics +41 52 675 3777

Central Europe & Greece +41 52 675 3777

Denmark +45 80 88 1401

Finland +41 52 675 3777

France & North Africa +33 (0) 1 69 86 81 81

Germany +49 (221) 94 77 400

Hong Kong (852) 2585-6688

India (91) 80-22275577

Italy +39 (02) 25086 1

Japan 81 (3) 6714-3010

Luxembourg +44 (0) 1344 392400

Mexico, Central America & Caribbean 52 (55) 56666-333

Middle East, Asia and North Africa +41 52 675 3777

The Netherlands 090 02 021797

Norway 800 16098

People's Republic of China 86 (10) 6235 1230

Poland +41 52 675 3777

Portugal 80 08 12370

Republic of Korea 82 (2) 528-5299

Russia & CIS 7 095 775 1064

South Africa +27 11 254 8360

Spain (+34) 901 988 054

Sweden 020 08 80371

Switzerland +41 52 675 3777

Taiwan 886 (2) 2722-9622

United Kingdom & Eire +44 (0) 1344 392400

USA 1 (800) 426-2200

For other areas contact Tektronix, Inc. at: 1 (503) 627-7111

Updated 5 January 2006

Our most up-to-date product information is available at:
www.tektronix.com



Copyright © 2006, Tektronix. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

2/06 HB/WOW

85W-16656-3

Tektronix
Enabling Innovation