

8000 Series EOS/ESD Protection Module

80A02 Data Sheet



Features & Benefits

- Single-channel Electrostatic 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)

The **80A02 EOS/ESD Protection module** protects the sampling bridge of Tektronix electrical sampling module inputs from damage due to electro-overstress (EOS) and electrostatic 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 CSA1K 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 electrostatic 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.)

Calibration
www.raeservices.com

To receive a calibration and/or repair quote-RMA from R.A.E. Services Inc.
Click here>> www.raeservices.com/services/quote.htm

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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 kΩ 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 - 12 inch length 20 GHz SMA cable.

Replaceable Items

015-1022-01 – SMA 50 Ω Termination

174-4878-xx – 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-xx.



For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tektronix.com



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