



Getting started with the Short – Open - Load

Background

The Short-Open-Load (SOL) calibrator is an all in one unit that allows for simple calibration of test equipment that has a SOL routine built in or can be used to manually calibrate equipment. The calibrator as supplied has three SMA male connectors attached to the PCB to allow easy connection to test equipment that uses SMA components. A SMA – SMA adapter is also included to allow adapting the calibrator to different SMA genders.

Notes for care and use

In use the SOL needs no special attention, follow the calibration routine specified by the equipment being tested, and swap out each connector as required/dictated by the calibration routine.

It is worth being aware that the 'Load' portion has an SMD 50 Ω 5GHz capable resistor just above the connector. This component is obviously delicate and care should be attended to ensure the component is not damaged or knocked in storage or general use.

Do not transmit into any of the connectors, the calibrator will not withstand that and will be damaged, as may be the transmitting equipment.

Capability

Testing has shown that the load is capable of being used to 1GHz satisfactorily. The load resistor is a high performance type and while the design has been honed to ensure best RF practice, the use of FR4 laminate and commercial grade connectors limits the usable upper frequency to below 5 GHz.

For help or questions in use contact us at: steve@electroresales.com





Typical results of the SMA SOL unit with a low cost Vector analyzer

