

DELTA VSD (DVsd) TEST

DVSD is the difference of two VSD (body diode voltage drop) measurements done before and after heating up the device for a certain period (heating time).

How Test Is Done:

With device at off state, a small current is forced across the body diode and the voltage drop is measured (VSD1).

Then device is turned on and heated up for a specified amount of time. A voltage is applied in the Drain to force a defined large current across the Drain-Source terminals at a specified period of time.

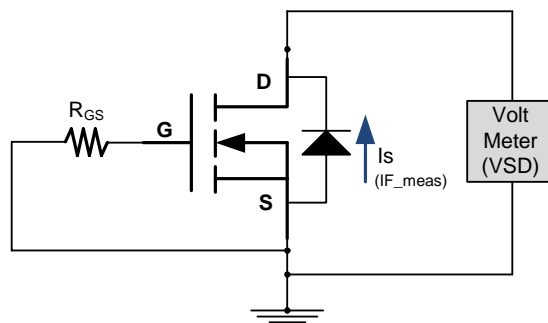
After the device heating event, the device is switched back off and the same small current (as the initial forced value) is forced through the body diode and the voltage drop is again measured (VSD2).

A good device performance will give a very minimal voltage difference measurement between VSD1 and VSD2.

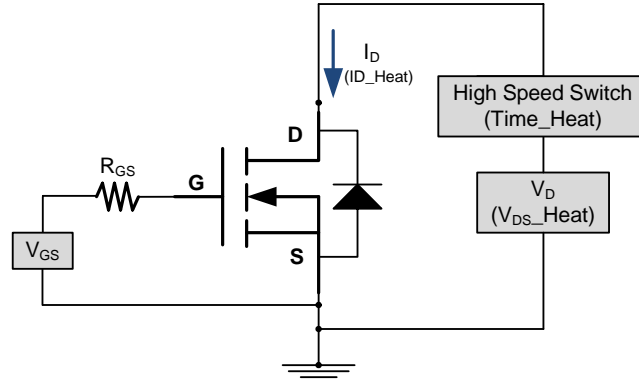
$$DVSD = VSD1 - VSD2$$

Test Method Diagram

A. VSD Measurement



B. Heating Event



Timing Chart for DVSD Test for MOSFET's

