



Advisory Product Change Notification Datasheet Updates

Product Group: Vishay Siliconix/Dec 01 2015 PCN-SIL-0422015 Rev 0

Improvement of Gate Resistance Minimum Limit

Part Number: SQ1431EH
Datasheet update Revision B to C

Dear Valued Customer:

As part of Vishay Siliconix commitment to Quality we would like to extend to you an advisory notification of an update to the datasheet SQ1431EH. The datasheet has been updated with lower gate resistance minimum limit. A comparison of old and new limits of gate resistance (Rg) is presented in the table below.

Vishay Part Number	Old			New		
	Rg min (Ω)	Rg typ (Ω)	Rg max (Ω)	Rg min (Ω)	Rg typ (Ω)	Rg max (Ω)
SQ1431EH-T1_GE3	6.5	12.5	18.5	4.5	12.5	18.5

The change in the value of minimum Rg limit is not expected to influence the application for reasons listed below:

- Change in minimum limit of Rg is small in comparison to the spread between minimum to maximum limits of Rg
- Most automotive applications use an external gate resistor between the gate drive and the MOSFET and change due to lowering of Rg limit is a small fraction of the total (external and internal) gate resistance
- Automotive applications typically operate at lower frequencies (10s of kHz) and use MOSFET gate drivers with output resistance that is higher in comparison to the internal gate resistance of the MOSFET, therefore the effect of small deviation in gate resistance on switching behavior is expected to be negligible

Sincerely,

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