PCN# : P69FAAB
Issue Date : Sep. 27, 2016

Information Only Notification

This is to inform you that a change is being made to the following products.

This is a minor change that has no impact on product quality, reliability, electrical or mechanical performance. Affected products will remain fully compliant to all published specifications. Notification is being made for informational purposes only and there is no approval required. Products incorporating this change may be shipped interchangeably with existing unchanged products on or after the issue date of this notification.

Please contact your local Customer Quality Engineer if you have any questions regarding this notification.

Implementation of change:

Description of Change (From) :
1. Absolute Maxium Ratings - Operating Temperature -40C to 85C (page 4)
2. Recommended Operating Conditions (Page 5)
3. Note 5 does not exist (Page 5)
4. Figures 4-12 has 85C as the max temp.
5. Figures 6 and 9 (Igss vs Vgs) - x-axis from 60V
6. Absolute Max Ratings : Pulsed Input at 46 A max (page 4)
7. Absolute Max Ratings : Power Dissipation (PD) 1.2W/0.38W. (page 4)
8. Features Section (Page 1)
   "Low Power Loss GreenBridgeTM Replaced With Diode Bridge"
   "Low rDS(on) MOSFETs"

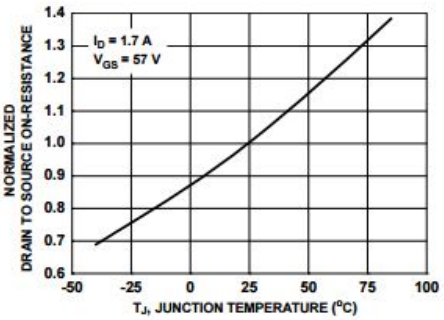


Figure 4. Normalized On Resistance vs. Junction Temperature

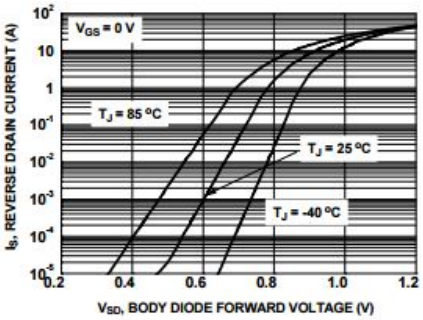


Figure 5. Source to Drain Diode Forward Voltage vs. Source Current

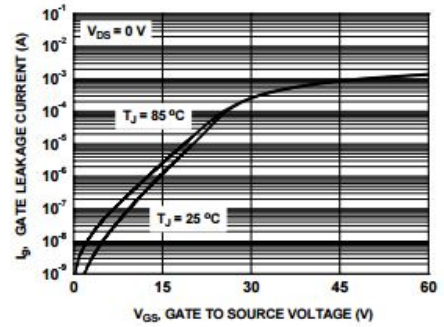


Figure 6. Gate Leakage Current vs. Gate to Source Voltage

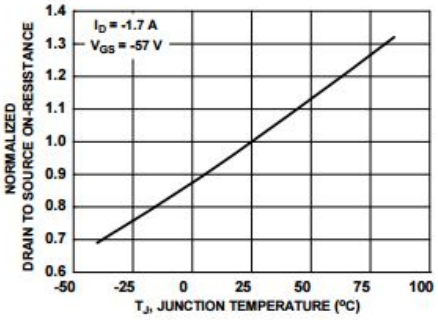


Figure 7. Normalized On Resistance vs. Junction Temperature

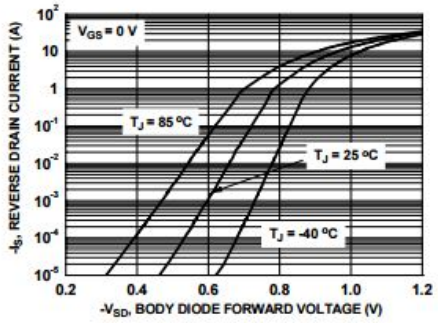


Figure 8. Source to Drain Diode Forward Voltage vs. Source Current

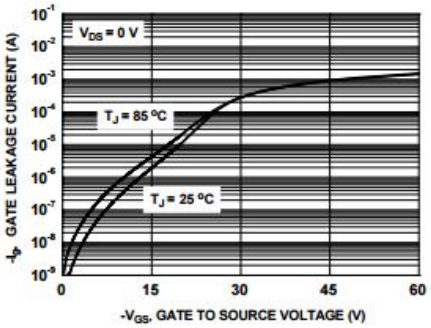


Figure 9. Gate Leakage Current vs. Gate to Source Voltage

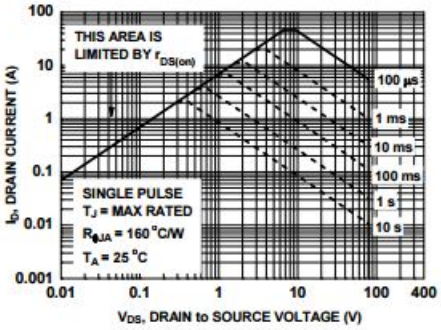


Figure 10. Forward Bias Safe Operating Area

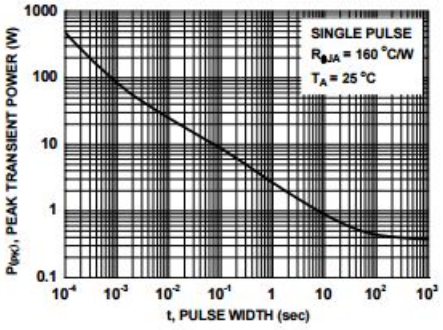


Figure 11. Single Pulse Maximum Power Dissipation

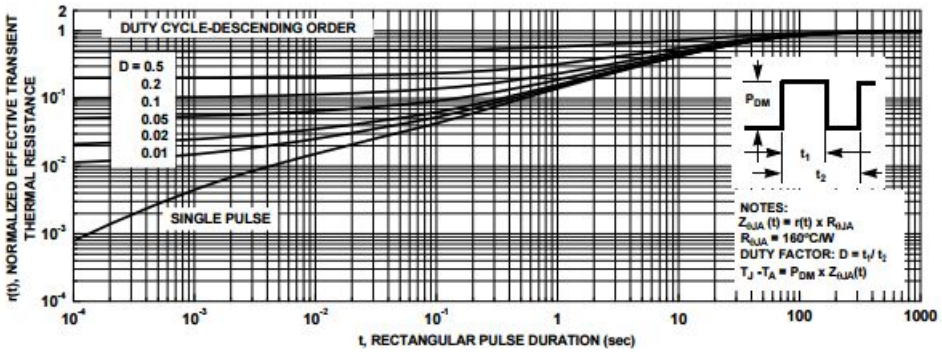
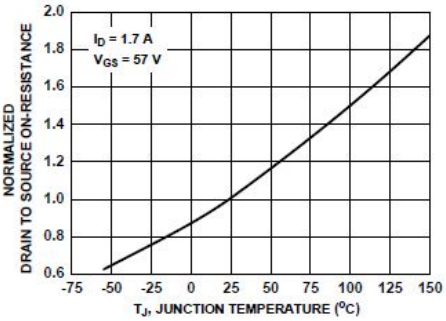


Figure 12. Junction-to-Ambient Transient Thermal Response Curve

Description of Change (To) :

1. Absolute Maximum Ratings - to "Max Junction Temperature" with max of 150C
2. Added two lines under Recommended Operating Conditions:
   -Ambient Operation Temperature (TA) : -40 to 85 'C
   -Junction Operating Temperature (Tj) : -40 to 125'C Note (5)
3. Added note (5) to the bottom of page 5 as follows :
   "Backfeed Voltage can not be guaranteed for junction temperature in excess of 85'C.
   See VBF in Electrical Characteristics Table."
4. Changed Figures 4-12 to include 125C data points
5. Figures 6 and 9 (Igss vs Vgs) - x-axis updated to 70V .
6. Absolute Max Ratings : Pulsed Input updated to 58 A max
   (due to Tjmax changed to 150C from 85C.)
7. Absolute Max Ratings : updated Power Dissipation (PD) to 2.5W/0.78W
   (due to Tjmax changed to 150C from 85C.)
8. Features udpated to
   "Low Power Loss GreenBridgeTM Replaces Diode Bridge".
   "Low rDS(on) 80V Rated MOSFETs"



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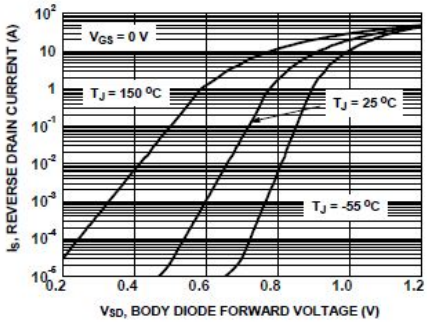

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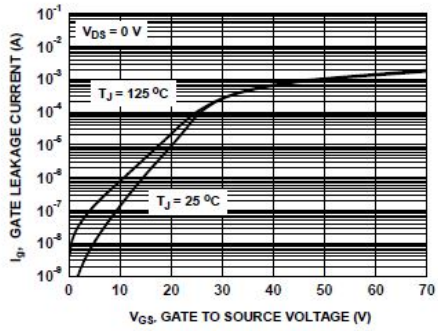


Figure 6. Gate Leakage Current vs. Gate to Source Voltage

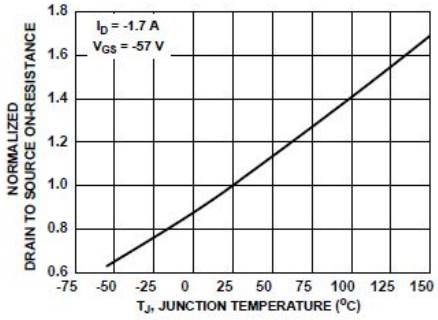


Figure 7. Normalized On Resistance vs. Junction Temperature

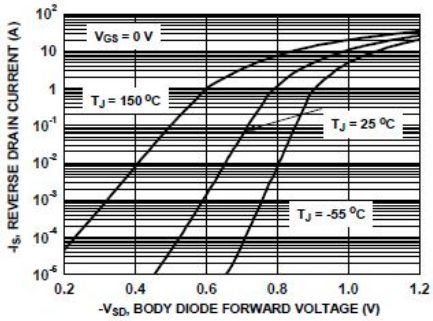
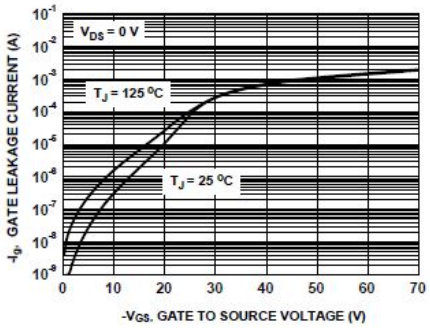


Figure 8. Source to Drain Diode Forward Voltage vs. Source Current



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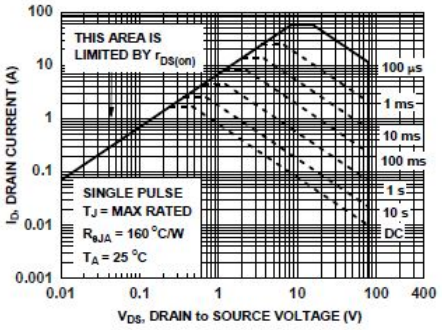

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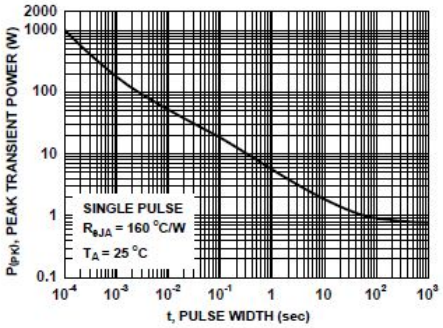

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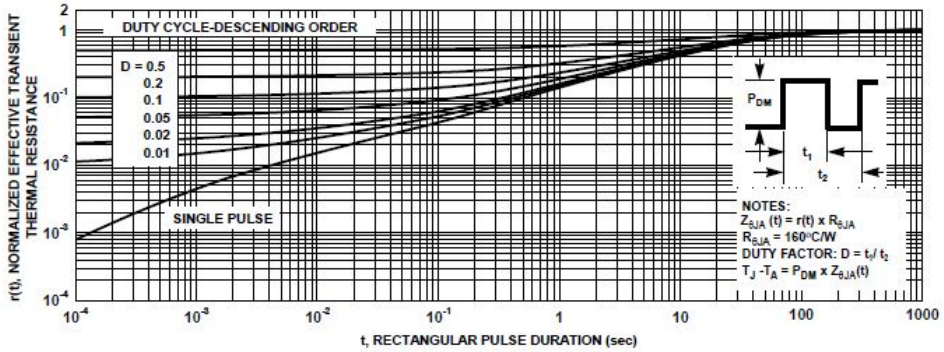

Figure 12. Junction-to-Ambient Transient Thermal Response Curve

Reason for Change:
This is a Datasheet change only.

This device was qualified with 150C Tj maximum, however datasheet was under rated as 85C Tj max.. Therefore updating the Tj max from 85C to 150C, which results in updates to the power dissipation, Pulse ID, and data curves accordingly. Also updated some features, descriptions and typos at the same time.

Affected Product(s):

FDMQ8205		