



PCN# : P684AAB  
Issue Date : Aug. 18, 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) :

- Figures 11, 12 and 13 (Safe Operating Area (SOA) and Thermal curves based on Theta-JA data. (Page 4,5)
- Figure 10 had the package limit datapoint (page 4)
- MOSFET Maximum Ratings - ID (Drain Current) - (page 1)
  - no continuous ID at 100C
  - 25C Continuous Rating = 70 A
  - Pulsed ID = 150 A.

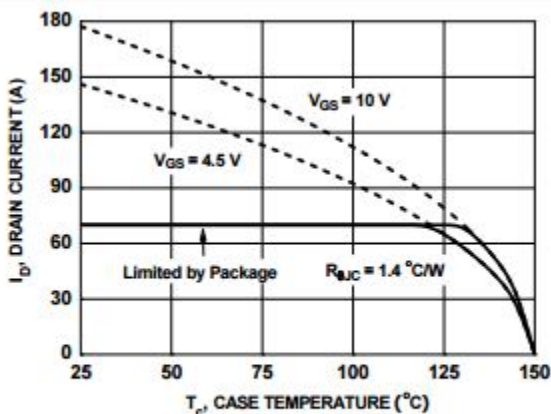


Figure 10. Maximum Continuous Drain Current vs Case Temperature

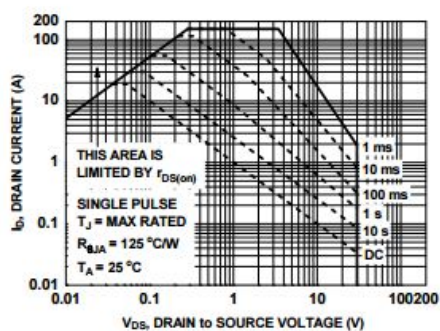


Figure 11. Forward Bias Safe Operating Area

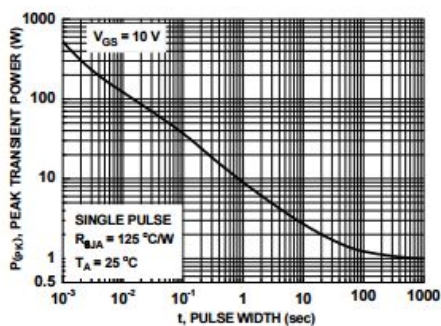


Figure 12. Single Pulse Maximum Power Dissipation

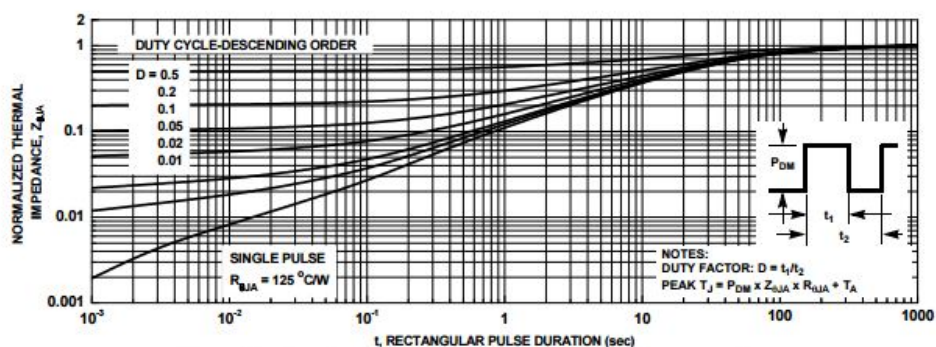


Figure 13. Junction-to-Ambient Transient Thermal Response Curve

Description of Change (To) :

1. Figures 11, 12 and 13 (Safe Operating Area (SOA) and Thermal curves updated to be based on Theta-JC data. (Page 4,5)
2. Remove package limit from Figure 10 as the package limit test is not ideal test (page 4)
3. MOSFET Maximum Ratings - ID (Drain Current) - (page 1)
  - a) Continuous Id added at 100C with rating of 112 A
  - b) 25C Continuous Rating = 176 A
  - c) added Notes 5 and 6

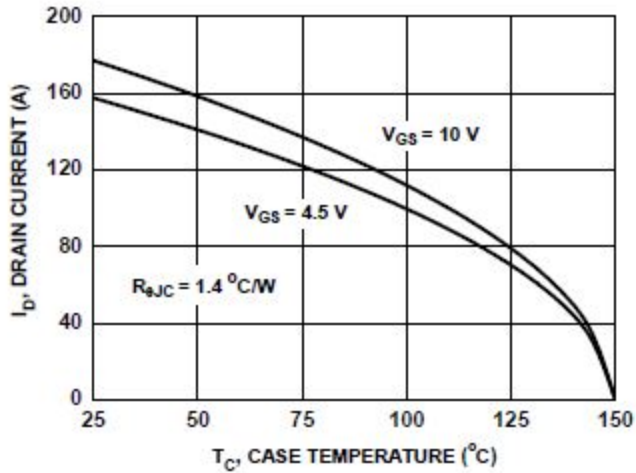


Figure 10. Maximum Continuous Drain Current vs. Case Temperature

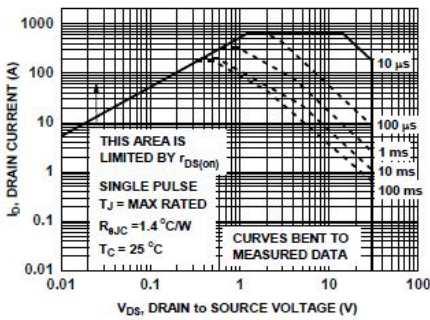


Figure 11. Forward Bias Safe Operating Area

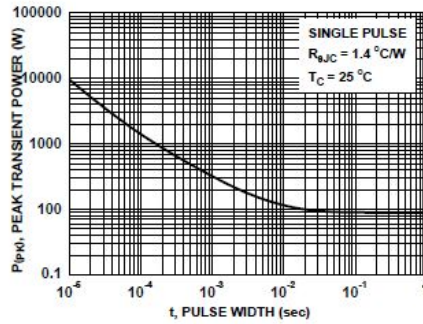


Figure 12. Single Pulse Maximum Power Dissipation

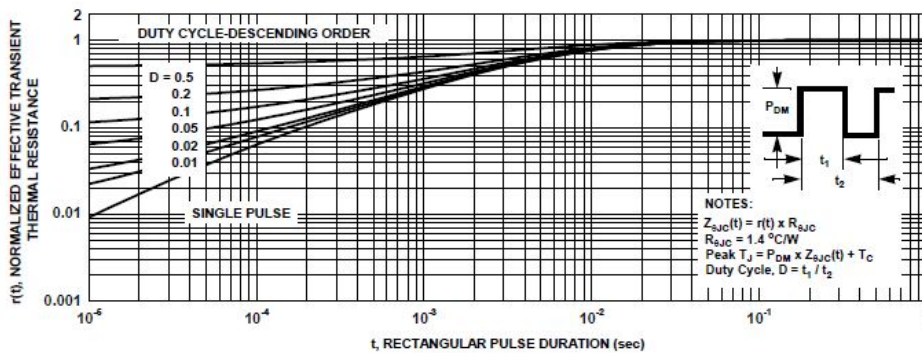


Figure 13. Junction-to-Case Transient Thermal Response Curve

Notes 5 and 6

5. Computed continuous current limited to Max Junction Temperature only, actual continuous current will be limited by thermal & electro-mechanical application board design.
6. Pulsed  $I_D$  please refer to Fig 11 SOA graph for more details.

Reason for Change:

This is a Datasheet change only.

Updated the SOA, thermal curves and ID (Drain Currents) to represent Theta-JC data as this is more aligned to actual application usage.



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**Affected Product(s):**

FDMS7658AS	FDMS7658AS_SN00232	
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