

PCN# : P627AAB

Issue Date : Mar. 04, 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. MOSFET Maxium ratings ID (Continuous Drain Current) From = (See image below)
- 2. Figures 10 through 13 were based on Junction to Ambient Thermal resistance, Rthja (pages 4,5)

#### MOSFET Maximum Ratings T<sub>C</sub> = 25 °C unless otherwise noted

Symbol	Parameter		Ratings	Units		
V <sub>DS</sub>	Drain to Source Voltage			30	V	
V <sub>GS</sub>	Gate to Source Voltage		(Note 4)	±20	V	
I <sub>D</sub>	Drain Current -Continuous (Package limited)	T <sub>C</sub> = 25 °C		100		
	-Continuous (Silicon limited)	T <sub>C</sub> = 25 °C		232	_ ,	
	-Continuous	T <sub>A</sub> = 25 °C	(Note 1a)	36	A	
	-Pulsed			200		
E <sub>AS</sub>	Single Pulse Avalanche Energy		(Note 3)	544	mJ	
P <sub>D</sub>	Power Dissipation	T <sub>C</sub> = 25 °C		104	w	
	Power Dissipation	T <sub>A</sub> = 25 °C	(Note 1a)	2.5	vv	
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Junction Temperature Range		-55 to +150	°C		

#### Description of Change (To):

- 1. MOSFET Maxium ratings ID (Continuous Drain Current) To = (See image below) Parameter wording and Ratings Value changes
- 2. Figures 10 through 13 are based on Junction to Case Thermal resistance, Rthjc (pages 4,5)

## MOSFET Maximum Ratings $T_C = 25$ °C unless otherwise noted.

Symbol	Parameter			Ratings	Units
V <sub>DS</sub>	Drain to Source Voltage			30	V
V <sub>GS</sub>	Gate to Source Voltage		(Note 4)	±20	V
I <sub>D</sub>	Drain Current -Continuous	T <sub>C</sub> = 25 °C	(Note 5)	267	
	-Continuous	T <sub>C</sub> = 100 °C	(Note 5)	169	A
	-Continuous	T <sub>A</sub> = 25 °C	(Note 1a)	36	_ ^
	-Pulsed		(Note 6)	1210	
E <sub>AS</sub>	Single Pulse Avalanche Energy		(Note 3)	544	mJ
P <sub>D</sub>	Power Dissipation	T <sub>C</sub> = 25 °C		104	w
	Power Dissipation	T <sub>A</sub> = 25 °C	(Note 1a)	2.5	
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Junction Temperature Range			-55 to +150	°C

Reason for Change: This is a Datasheet change only.

Updates to Continuous Drain Current Ratings and Thermal performance graphs are being updated to align with Thermal Resistance, Junction to Case data to be consistent throughout the datasheet.



Affected	Product(s)	):
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FDMS7650	



# **Appendix A: Changed Products**

DIGI-KEY: DIGI-KEY

PCN Number: P627AAB

Customer Name: DIGI-KEY CORPORATION Customer Code: 0003948101

Product	Customer Part Number	BBB	Drawing
FDMS7650		Υ	N