

DESIGN/PROCESS CHANGE 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.

Please contact your local Customer Quality Engineer if you have any questions regarding this notification. Alternatively, you may send an email request for information to PCNSupport@fairchildsemi.com.

Implementation of change:

Expected First Shipment Date for Changed Product : Sep. 27, 2013

Expected First Date Code of Changed Product :1339

Description of Change (From) :
SOA curve generated by calculation of maximum power dissipation

Description of Change (To) :
SOA curve generated by actual measurement data

Reason for Change:

Historically, SOA curve was calculated using thermal resistance and maximum power dissipation with pulse duration. However, according to improving technology of MOSFET, current density is greatly improved. Consequently, transconductance (g_{FS}) is much higher than previous generation MOSFET. In power conversion applications, newer MOSFETs give better efficiency due to lower conduction and switching losses. However, in linear mode applications, they have a weak ruggedness compared to previous generation MOSFET which has low transconductance (g_{FS}). The actual SOA ruggedness of newer MOSFETs is lower than the calculated value, especially in high voltage and low current area.

Therefore, FSC decided to revise the SOA curve in order to provide more accurate information.

Affected Product(s):

FDA032N08	FDB024N06	FDB031N08
FDB047N10	FDB088N08	FDB088N08_F140
FDB088N08_F141	FDB120N10	FDB150N10
FDP025N06	FDP032N08	FDP032N08_F102
FDP032N08_F149	FDP047N08	FDP047N08V_F102
FDP047N08V_F149	FDP047N08_F102	FDP047N08_F149
FDP047N10	FDP054N10	FDP054N10_SN00191
FDP054N10_SN00215	FDP090N10	FDP090N10_G
FDP100N10	FDP120N10	FDP150N10
FDP150N10_G	FDP5800	FDPF2710T
FDPF3860T	FDPF680N10T	