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Final Product/Process Change Notification Document #:FPCN23681X1 Issue Date:20 Jan 2023

Title of Change:	Update to FPCN23681X- To inform customers the correction of description and purpose	
Proposed First Ship date:	21 Mar 2023 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or Danh.Trinh@onsemi.com	
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
Additional Reliability Data:	Contact your local onsemi Sales Office or ffxg4t@onsemi.com	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <u>PCN.Support@onsemi.com</u>	
Marking of Parts/ Traceability of Change:	Clean date code will be advised upon of request.	
Change Category:	Assembly Change	
Change Sub-Category(s):	Material Change	
Sites Affected:		

onsemi Sites	External Foundry/Subcon Sites
None	Tongfu Microelectronics

Description and Purpose:

In the original FPCN23681X, 8 mils wire size & EMC change for Ultrafast devices was erroneously mentioned in the description and purpose.

This update notification is being issued to clarify and correct the changes below:

From :

This is the Final Product Change Notification to announce the qualification of to 8 mils wire size and G700HFC mold compound on selected Rectifier Ultrafast devices in DPAK package. This change is to improve quality robustness.

To:

This is the Final Product Change Notification to announce the qualification of G700HFC mold compound on selected Rectifier devices in DPAK package. This change is to improve quality robustness.

Once the expiration of the FPCN, all products listed here will be changed with new Bill of Material.

	Before Change Description	After Change Description
Mold compound	CEL8240HF10NF-2	G700HFC

There is no product marking change as a result of this change.

Note: In parallel to the issuance of this update notice, the original FPCN document has been corrected. Recipients are encouraged to download a fresh copy of FPCN23681X from the email notification they received in Dec. 14, 2022 to view the correct description of change, otherwise refer to this Update FPCN.

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Reliability Data Summary:

QV DEVICE NAME: MBRD5H100T4G RMS: V84396, V85142 PACKAGE: DPAK

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/231
TC	JESD22-A104	Ta = -65°C to +150°C	1000 сус	0/231
UHAST	JESD22-A102	130°C, 100% RH, 18.8psig, unbiased	96 hrs	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/924
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45

QV DEVICE NAME: MURHD560T4G RMS: V84397 PACKAGE: DPAK

Test	Specification	Condition	Interval	Result
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/231
тс	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/231
UHAST	JESD22-A102	130°C, 100% RH, 18.8psig, unbiased	96 hrs	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/924
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 sec		0/45

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Part Number	Qualification Vehicle	
MBRD620CTT4G	MBRD5H100T4G	
MURHD560W1T4G	MURHD560T4G	



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MBRD660CTT4G	MBRD5H100T4G
MBRD835LT4G	MBRD5H100T4G
MBRD1045T4G	MBRD5H100T4G
MBRD350T4G	MBRD5H100T4G
MBRD650CTT4G	MBRD5H100T4G
MURD530T4G	MURHD560T4G
MURD550PFT4G	MURHD560T4G
MURD340T4G	MURHD560T4G
MBRD640CTT4G	MBRD5H100T4G
MURHD560T4G	MURHD560T4G
MBRD5H100T4G	MBRD5H100T4G
MBRD340T4G	MBRD5H100T4G
MURD320T4G	MURHD560T4G
MBRD360T4G	MBRD5H100T4G
MBRD1035CTLT4G	MBRD5H100T4G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
MBRD620CTT4G		MBRD5H100T4G	NA	
MBRD660CTT4G		MBRD5H100T4G	NA	
MBRD835LT4G		MBRD5H100T4G	NA	
MBRD1045T4G		MBRD5H100T4G	NA	
MBRD650CTT4G		MBRD5H100T4G	NA	
MURD530T4G		MURHD560T4G	NA	
MURD550PFT4G		MURHD560T4G	NA	
MURD340T4G		MURHD560T4G	NA	
MBRD640CTT4G		MBRD5H100T4G	NA	
MURHD560T4G		MURHD560T4G	NA	
MBRD5H100T4G		MBRD5H100T4G	NA	
MBRD340T4G		MBRD5H100T4G	NA	
MURD320T4G		MURHD560T4G	NA	
MBRD360T4G		MBRD5H100T4G	NA	
MURHD560W1T4G		MURHD560T4G	NA	
MBRD1035CTLT4G		MBRD5H100T4G	NA	