

Final Product/Process Change Notification Document #:FPCN22416XA

Issue Date:10 Nov 2021

Title of Change:	Qualification of mold compound G700HF in D2PAK package in onsemi Seremban Malaysia (SBN)			
Proposed First Ship date:	03 May 2022 or earlier if approved by customer			
Contact Information:	Contact your local onsemi Sales Office or <u>HasratulAzwan.Darun@onsemi.com</u>			
PCN Samples Contact:	Contact your local onsemi Sales Office or < PCN.samples@onsemi.com . 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 MohdAzizi.Azman@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 PCN.Support@onsemi.com			
Marking of Parts/ Traceability of Change:	The affected products will be identified with date code.			
Change Category:	Assembly Change			
Change Sub-Category(s):	Material Change			
Sites Affected:				
onsemi Sites		External Foundry/Subcon Sites		
onsemi Seremban, Malaysia		None		

Description and Purpose:

To notify customers of the change in mold compound for device NTB25P06T4G in D2PAK package from ShowaDenko GE8000CH4ES to Sumitomo G700HF. The change is to improve product package robustness.

	Before Change Description	After Change Description	
Mold Compound	GE8000CH4ES	G700HF	

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Reliability Data Summary:

QV DEVICE NAME: MVB50P03HDLT4G (MOSFET)

RMS #: S44541 PACKAGE : D2PAK

PACKAGE : D	PACKAGE: DZPAK				
Test	Specification	Condition	Interval	Result	
HTRB	JESD22-A108	Ta = 150 °C, bias = 100% of rated V	1008 hrs	0/231	
HTGB	JESD22-A108	Ta = 150°C, 100% max rated Vgss	1008 hrs	0/231	
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/231	
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 3.5min	8572 cyc	0/231	
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	0/231	
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/231	
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V or up to maximum100V	1008 hrs	0/231	
PC	J-STD-020 JESD-A113	MSL 1 @ 245 °C		0/308	
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30	
SD	JSTD002	Ta = 245°C, 10 sec		0/15	

Electrical Characteristics Summary:

Electrical characteristic 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
NTB25P06T4G	MVB50P03HDLT4G

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Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTB25P06T4G		MVB50P03HDLT4G	NA	