



Title of Change:	Qualification of mold compound G700HF for automotive devices in DPAK package in ON Semiconductor Vietnam (OSV).						
Proposed Changed Material First Ship Date:	1 November 2019 <i>or earlier upon customer approval</i>						
Current Material Last Order Date:	31 July 2019 Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.						
Current Material Last Delivery Date:	31 October 2019 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.						
Product Category:	Active components – Discrete components						
Contact information:	Contact your local ON Semiconductor Sales Office or < Phuong.Hoang@onsemi.com >						
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or < Phuong.Hoang@onsemi.com > Sample requests are to be submitted no later than 45 days after publication of this change notification.						
Sample Availability Date:	1 July 2018						
PPAP Availability Date:	30 July 2018						
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < cheanching.sim@onsemi.com >.						
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.						
Change Category	Type of Change						
Process – Assembly	Change of mold compound						
Description and Purpose: This is the Final Notification to announce the plan to qualify mold compound G700HF on DPAK packaged devices in ON Semiconductor Vietnam (OSV). This change is to improve product package robustness Upon the expiration of this FPCN, these products will be assembled with new Mold Compound.							
<table border="1"> <thead> <tr> <th>Piece part</th><th>Before Change Description</th><th>After Change Description</th></tr> </thead> <tbody> <tr> <td>Mold compound</td><td>GE8000CH4ES</td><td>G700HF</td></tr> </tbody> </table>		Piece part	Before Change Description	After Change Description	Mold compound	GE8000CH4ES	G700HF
Piece part	Before Change Description	After Change Description					
Mold compound	GE8000CH4ES	G700HF					
ON Semiconductor Vietnam is qualified site for DPAK Standard Automotive discrete packaged products and are ISO TS16949 certified. Products have been qualified to Automotive requirements and continue remain as Pb-free, Halide free and RoHS compliant.							
Reason / Motivation for Change:	QUALITY IMPROVEMENT – To improve product package robustness.						
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.						



Sites Affected:	ON Semiconductor Sites: ON Dong Nai Province, Vietnam	External Foundry/Subcon Sites: None
Marking of Parts/ Traceability of Change:	There is no product marking change as a result of this change. Clean date code will be advised as requested.	

Reliability Data Summary:**QV DEVICE NAME:** STD110N02RT4G (Mosfet)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 175 °C, bias = 100% of rated V	1008 hrs	0/77
HTGB	JESD22-A108	Ta = 175°C, 100% max rated Vgss	1008 hrs	0/77
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

QV DEVICE NAME: NJVMJD340T4G (Bipolar)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, bias = 100% of rated V	1008 hrs	0/77
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

**QV DEVICE NAME:** NJVMJD350T4G (Bipolar)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, bias = 100% of rated V	1008 hrs	0/77
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	85°C, 85% RH, bias = 100V max	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15

QV DEVICE NAME: SURHD8560W1T4G (Ultrafast)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150°C, Tj(est) = 175°C, bias = 100% of rated V	1008 hrs	0/231
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 cyc	0/231
AC	JESD22-A102	121°C, 100% RH, 15psig, 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: NBRD5H100T4G (Schottky)**PACKAGE:** DPAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 90°C, bias = 100% of rated V	1008 hrs	0/77
HTSL	JESD22-A103	Ta = 175 °C	1008 hrs	0/77
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta = +25°C, deltaTj = 100°C max, Ton = Toff = 2min	15000 cyc	0/77
TC	JESD22-A104	Ta = -65°C to +150°C	1000 cyc	0/77
AC	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V	1008 hrs	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/308
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 10 sec		0/15



NOTE: AEC-1pager is attached.

To access file attachments on pdf copy of PCN, please be guided by the steps below:

1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file/s

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Current Part Number	Qualification Vehicle
NBRD5H100T4G	NBRD5H100T4G
NBRD5H100T4G-VF01	
NRVBD1035VCTLT4G	
NRVBD360VT4G	
NRVBD640CTG	
NRVBD640CTG-VF01	
NRVBD640CTT4G	
NRVBD640VCTT4G	
NRVBD650CTG	
NRVBD650CTG-VF01	
NRVBD650CTT4G	
NRVBD650CTT4G-VF01	
NRVBD660CTG	
NRVBD660CTG-VF01	
NRVBD660CTRLG	
NRVBD660CTRLG-VF01	
NRVBD660CTT4G	
SBR640CTT4G	
SBR660CTT4G	
SBR835LT4G	
SBR835LT4G-VF01	
SBRD81035CTLG	
SBRD81035CTLG-VF01	



SBRD81035CTLT4G	NBRD5H100T4G
SBRD81045T4G	
SBRD8320G	
SBRD8320G-VF01	
SBRD8320T4G	
SBRD8320T4G-VF01	
SBRD8330G	
SBRD8330G-VF01	
SBRD8330T4G	
SBRD8330T4G-VF01	
SBRD8340G	
SBRD8340G-VF01	
SBRD8340T4G	
SBRD8340T4G-VF01	
SBRD8350G	
SBRD8350G-VF01	
SBRD8350T4G	
SBRD8350T4G-VF01	
SBRD8360G	
SBRD8360G-VF01	
SBRD8360RLG	
SBRD8360RLG-VF01	
SBRD8360T4G	
SBRD8835LG	
SBRD8835LG-VF01	
SBRD8835LT4G	
SBRD8835LT4G-VF01	
SBRV640VCTT4G	
SBRV660VCTT4G	
SNRVBD660CTT4G	
SSBRD81045T4G	
NJVMJD31CT4G	NJVMJD340T4G NJVMJD350T4G
NJVMJD112G	
NJVMJD112T4G	
NJVMJD117T4G	
NJVMJD122T4G	
NJVMJD122T4G-VF01	
NJVMJD127T4G	
NJVMJD128T4G	



NJVMJD148T4G	
NJVMJD148T4G-VF01	
NJVMJD210T4G	
NJVMJD210T4G-VF01	
NJVMJD243T4G	
NJVMJD253T4G	
NJVMJD253T4G-VF01	
NJVMJD2955T4G	
NJVMJD3055T4G	
NJVMJD31CG	
NJVMJD31CRLG	
NJVMJD31CT4G-VF01	
NJVMJD31T4G	
NJVMJD32CG	
NJVMJD32CT4G	
NJVMJD32CT4G-VF01	
NJVMJD32T4G	
NJVMJD340T4G	
NJVMJD340T4G-VF01	
NJVMJD350T4G	NJVMJD340T4G
NJVMJD41CT4G	NJVMJD350T4G
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NJVMJD42CRLG	
NJVMJD42CT4G	
NJVMJD42CT4G-VF01	
NJVMJD44E3T4G	
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NJVMJD44H11RLG	
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NJVMJD45H11G	
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NJVMJD50T4G	
NJVMJD6039T4G	



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NVD3055-094T4G	
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NVD6415ANLT4G-VF01	
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NVD6416ANLT4G	
NVD6416ANLT4G-001	
NVD6416ANLT4G-001-VF01	
NVD6416ANLT4G-VF01	



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NVD6495NLT4G	
NVD6495NLT4G-VF01	
STD110N02RT4G	
STD110N02RT4G-VF01	
STD24N06LT4G	
STD24N06LT4G-VF01	
STD3055L104T4G	
STD5406NT4G	
STD5406NT4G-VF01	
STD5407NT4G	
STDV3055L104T4G	
SVD14N03RT4G	
SVD2955T4G	
NRVHPD660T4G	SURHD8560W1T4G
NRVSRD620VCTT4G	
NRVSRD620VCTT4RG	
NRVUD320VT4G	
NRVUD320W1T4G	
NRVUD320W1T4G-VF01	
NRVUD340T4G	
NRVUD340T4G-VF01	
NRVUD550PFT4G	
NRVUD550PFT4G-VF01	
NRVUD620CTG	
NRVUD620CTG-VF01	
SSRD8620CTRG	
SSRD8620CTRG-VF01	
SSRD8620CTT4G	
SSRD8620CTT4RG	
SSURHD8560W1T4G	
SUR620CTT4G	
SUR620CTT4G-VF01	
SURD8320T4G	
SURD8330T4G	
SURD8330T4G-VF01	
SURD8530T4G	
SURD8530T4G-VF01	



Final Product/Process Change Notification

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Issue Date: 16 August 2018

SURHD8560T4G	SURHD8560W1T4G
SURHD8560T4G-VF01	
SURHD8560W1T4G	

Please be informed that parts impacted by this notice are Customer Specific parts, thus MPN & CPN info will not be reflected in the parts list of this Generic document. Instead please click the link to the addendum copy provided in the email notification to see full list of affected products specific to your company.