



Final Product/Process Change Notification

Document #:FPCN25473Z

Issue Date:20 Jun 2024

Title of Change:	Assembly Material Change from Sumitomo EME6600CS to Sumitomo EME-G700HF Epoxy Molding Compound for TO-252-3 IGBT Devices Assembled from onsemi Cebu
Proposed Changed Material First Ship Date:	27 Dec 2024 or earlier if approved by customer
Current Material Last Order Date:	N/A <i>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.</i>
Current Material Last Delivery Date:	N/A <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>
Product Category:	Active components – Discrete components
Contact information:	Contact your local onsemi Sales Office or Joseph.Mendoza@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Sample Availability Date:	24 May 2024
PPAP Availability Date:	24 Apr 2024
Additional Reliability Data:	Contact your local onsemi Sales Office or Aileen.Allado@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi 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	
Category	Type of Change
Process - Assembly	Change of encapsulation/sealing material

Description and Purpose:

This final notification is to inform customers about the change in epoxy molding compound from Sumitomo EME6600CS to Sumitomo EME-G700HF.

	Before Change Description	After Change Description
Mold Compound	Sumitomo EME6600CS	Sumitomo EME-G700HF

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



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Reason / Motivation for Change:	Process/Materials Change		
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 onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Cebu, Philippines		None	
Marking of Parts/ Traceability of Change:	Affected products will be identified with date code		

Reliability Data Summary:

QV DEVICE NAME: FGD3050G2

RMS: F85041, F91765

PACKAGE: TO-252-3

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=175°C, 480V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta=175°C	1008 hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Solderability	JSTD002	Ta = 245°C, 5 sec		0/66
Physical Dimensions	JESD22-B120			Passed

Note: AEC-1 pager is attached.

To view attachments:

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.

Electrical Characteristics Summary:

Electrical characteristics are not impacted.



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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**.

Current Part Number	New Part Number	Qualification Vehicle
ISL9V3040D3ST-R4940	#NONE	FGD3050G2
ISL9V2040D3ST	#NONE	FGD3050G2
ISL9V3040D3ST	#NONE	FGD3050G2