

Title of Change:	Qualification of mold compound second source GR710F at onsemi Suzhou, China for D2PAK devices
Proposed Changed Material First Ship Date:	29 Oct 2025 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
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:	31 Mar 2025
PPAP Availability Date:	31 May 2025
Additional Reliability Data:	Contact your local onsemi Sales Office
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

Process - Assembly

Type of Change

SEM-PA-11: Change of mold compound / encapsulation material

Description and Purpose:

This FPCN is to inform customers that onsemi has qualified a new green mold compound, GR710F, from the China supplier Hysol, as a second source for selected D2PAK Discrete products in onsemi Suzhou, China.

This will help improve supply chain flexibility.

	Before Change Description	After Change Description
Mold Compound	CEL8240HF10FC	CEL8240HF10FC & GR710F

All other aspects of the impacted products (form, fit, function) will remain unchanged.

There is no product marking change because of this change.

There are no changes in product electrical specifications.

Reason / Motivation for Change:	Process/Materials Change			
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	<p>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.</p> <p>No anticipated impacts.</p>			
Sites Affected:				
onsemi Sites			External Foundry/Subcon Sites	
onsemi Suzhou, China			None	
Marking of Parts/ Traceability of Change:	Keep same marking. Changed material will be identified by lot code.			
Reliability Data Summary:				
QV DEVICE NAME: NVB082N65S3F PACKAGE: D2PAK RMS: U86433				
Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 100% max rated V	1008hrs	0/231
HTGB	JESD22-A108	Tj=150°C, 100% max rated Vgss	1008hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 245 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cycs	0/231
HAST+PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/231
UHAST+PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
IOL+PC	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, Ton=Toff=3.5min	8572cycs	0/231
SD	JSTD002	Ta = 245°C, 5 sec		0/45
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.				
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 <u>PCN Customized Portal</u> .				
Current Part Number	New Part Number	Qualification Vehicle		
NVB099N65S3	#NONE	NVB082N65S3F		



Final Product/Process Change Notification

Document #:FPCN25812ZA

Issue Date:22 Apr 2025

NVB260N65S3	#NONE	NVB082N65S3F
NVB125N65S3	#NONE	NVB082N65S3F
NVB095N65S3F	#NONE	NVB082N65S3F