



Final Product/Process Change Notification

Document #:FPCN24763X

Issue Date:06 Nov 2023

Title of Change:	Qualification of alternate mold compound GR30 at onsemi Suzhou, China for TO247 devices	
Proposed First Ship date:	31 Mar 2024 or earlier if approved by customer	
Contact Information:	Contact your local onsemi Sales Office or Yun.Cui@onsemi.com , HuaBin.Cui@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 Jutta.Xu@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:	Keep same marking. Changed material will be identified by lot code.	
Change Category:	Assembly Change	
Change Sub-Category(s):	Material Change	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
onsemi Suzhou, China	None	
Description and Purpose:		
This FPCN is to inform customers that onsemi is qualifying new green mold compound GR30 from China local supplier Hysol, as alternative source on selected TO247 Discrete products in onsemi Suzhou, China. This will help improve supply chain flexibility.		
	Before Change Description	After Change Description
Mold Compound	EME 6600CS CEL8240HF10FC	EME 6600CS CEL8240HF10FC GR30
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.		



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Reliability Data Summary:

QV DEVICE NAME: FCH47N60F-F133

PACKAGE: TO-247

RMS: U86436

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 80% max rated V	1008hrs	0/77
HTGB	JESD22-A108	Tj= 150°C, 100% max rated Vgss	1008hrs	0/77
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/77
UHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/77
IOL	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, 5 min= Ton=Toff	6000cyics	0/40
RSH	JESD22-B106	Ta=265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 5 sec		0/15

QV DEVICE NAME: NDSH25170A

PACKAGE: TO-247

RMS: U88955/S89594/K89953

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 100% max rated V	1008_hrs	0/77
HTSL	JESD22-A103	Ta= 175°C	1008hrs	0/77
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	0/77
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/77
UHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/77
IOL	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, 5 min= Ton=Toff	6000cyics	0/40
RSH	JESD22-B106	Ta=265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 5 sec		0/15

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
NDSH25170A	NDSH25170A
NDSH10170A	NDSH25170A
FCH47N60F-F133	FCH47N60F-F133
FCH47N60-F133	FCH47N60F-F133