



Final Product/Process Change Notification

Document #:FPCN24855X

Issue Date:23 Oct 2023

Title of Change:	Qualification of alternate mold compound GR30 at onsemi Suzhou, China for TO220 and I2PAK 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 TO220 & I2PAK Discrete products in onsemi Suzhou, China. This will help improve supply chain flexibility.

	Before Change Description	After Change Description
Mold Compound for TO220	CEL8240HF10FC	CEL8240HF10FC GR30
Mold Compound for I2PAK	CEL8240HF10FC KTMC5900GM F01	CEL8240HF10FC KTMC5900GM F01 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: NTP055N65S3H

PACKAGE: TO-220

RMS: U88809/S89602/U92004

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
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	0/231
HAST	JESD22-A110	Temp = 130°C, 85% RH, ~ 18.8 psig, bias	96hrs	0/231
UHAST	JESD22-A118	Temp = 130°C, RH=85%, ~ 18.8 psig, unbiased	96hrs	0/231
IOL	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, 3.5 min= Ton=Toff	8572cyics	0/120
RSH	JESD22-B106	Ta=265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 5 sec		0/45

QV DEVICE NAME: FJI5603DTU

PACKAGE: I2PAK

RMS: U87340/S89596

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 80% max rated V	1008hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	0/231
HAST	JESD22-A110	Temp = 130°C, 85% RH, ~ 18.8 psig, bias	96hrs	0/231
UHAST	JESD22-A118	Temp = 130°C, RH=85%, ~ 18.8 psig, unbiased	96hrs	0/231
IOL	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, 3.5 min= Ton=Toff	8572cyics	0/120
RSH	JESD22-B106	Ta=265°C, 10 sec		0/30
SD	JSTD002	Ta = 245°C, 5 sec		0/45

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
FCI7N60	NTP055N65S3H
FCP067N65S3	NTP055N65S3H
FCP099N65S3	NTP055N65S3H



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FCP125N65S3	NTP055N65S3H
FCP125N65S3R0	NTP055N65S3H
FCP165N65S3	NTP055N65S3H
FCP165N65S3R0	NTP055N65S3H
FCP190N65S3	NTP055N65S3H
FCP190N65S3R0	NTP055N65S3H
FCP260N65S3	NTP055N65S3H
FCP360N65S3R0	NTP055N65S3H
FCP400N80Z	NTP055N65S3H
FCP600N65S3R0	NTP055N65S3H
FCP850N80Z	NTP055N65S3H
FDI030N06	NTP055N65S3H
FDI045N10A-F102	NTP055N65S3H
FDI150N10	NTP055N65S3H
FJI5603DTU	FJI5603DTU
FQI7N60TU	NTP055N65S3H
HUF75639S3	NTP055N65S3H
NTP125N60S5H	NTP055N65S3H
NTP360N80S3Z	NTP055N65S3H
NTP190N65S3HF	NTP055N65S3H
NTP185N60S5H	NTP055N65S3H
NTP165N65S3H	NTP055N65S3H
NTP150N65S3HF	NTP055N65S3H
NTP125N65S3H	NTP055N65S3H
NTP125N60S5FZ	NTP055N65S3H
NTP110N65S3HF	NTP055N65S3H
NTP095N65S3HF	NTP055N65S3H
NTP095N65S3H	NTP055N65S3H
NTP082N65S3HF	NTP055N65S3H
NTP082N65S3F	NTP055N65S3H
NTP067N65S3H	NTP055N65S3H
NTP055N65S3H	NTP055N65S3H

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FCI7N60		NTP055N65S3H	NA	
FCP099N65S3		NTP055N65S3H	NA	
FCP125N65S3		NTP055N65S3H	NA	
FCP125N65S3R0		NTP055N65S3H	NA	
FCP165N65S3		NTP055N65S3H	NA	
FCP190N65S3		NTP055N65S3H	NA	
FCP190N65S3R0		NTP055N65S3H	NA	
FCP360N65S3R0		NTP055N65S3H	NA	
FCP400N80Z		NTP055N65S3H	NA	
FCP600N65S3R0		NTP055N65S3H	NA	
FCP850N80Z		NTP055N65S3H	NA	
FDI030N06		NTP055N65S3H	NA	
FDI045N10A-F102		NTP055N65S3H	NA	
FDI150N10		NTP055N65S3H	NA	
FJI5603DTU		FJI5603DTU	NA	
FQI7N60TU		NTP055N65S3H	NA	
HUF75639S3		NTP055N65S3H	NA	
NTP360N80S3Z		NTP055N65S3H	NA	
NTP190N65S3HF		NTP055N65S3H	NA	
NTP185N60S5H		NTP055N65S3H	NA	
NTP165N65S3H		NTP055N65S3H	NA	
NTP150N65S3HF		NTP055N65S3H	NA	
NTP125N65S3H		NTP055N65S3H	NA	
NTP110N65S3HF		NTP055N65S3H	NA	
NTP095N65S3HF		NTP055N65S3H	NA	
NTP095N65S3H		NTP055N65S3H	NA	
NTP082N65S3HF		NTP055N65S3H	NA	
NTP082N65S3F		NTP055N65S3H	NA	
NTP067N65S3H		NTP055N65S3H	NA	
NTP055N65S3H		NTP055N65S3H	NA	
FCP067N65S3		NTP055N65S3H	NA	