



Final Product/Process Change Notification

Document #:FPCN24856X

Issue Date:04 Dec 2023

Title of Change:	Qualification of alternate mold compound GR710F at onsemi Suzhou, China for DPAK 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 GR710F from China local supplier Hysol, as alternative source on selected DPAK Discrete products in onsemi Suzhou, China. This will help improve supply chain flexibility.		
	Before Change Description	After Change Description
Mold Compound	KTMC5400SM CEL8240HF10FC KTMC5900GM EME 6600CS	KTMC5400SM CEL8240HF10FC KTMC5900GM EME 6600CS 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.		



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Reliability Data Summary:

QV DEVICE NAME: RFD16N05SM9A

PACKAGE: DPAK

RMS: U87209/U91931

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 80% max rated V	1008hrs	0/77
HTGB	JESD22-A108	Tj=175°C, 100% max rated Vgss	1008hrs	0/77
HTSL	JESD22-A103	Ta= 175°C	1008hrs	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/271
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	0/77
HAST+PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/77
UHAST+PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/77
IOL+PC	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, Ton=Toff=2 min	15000cyics	0/40
SD	JSTD002	Ta = 245°C, 5 sec		0/15

QV DEVICE NAME: KSC5502DTM

PACKAGE: DPAK

RMS: U87003/U91930

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 80% max rated V	1008hrs	0/77
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/271
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	0/77
HAST+PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/77
UHAST+PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/77
IOL+PC	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, Ton=Toff=2 min	15000cyics	0/40
SD	JSTD002	Ta = 245°C, 5 sec		0/15

QV DEVICE NAME: FQD6N40CTM-NBEA002

PACKAGE: DPAK

RMS: U87358

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 80% 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 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cyics	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=2min	15000cyics	0/231
SD	JSTD002	Ta = 245°C, 5 sec		0/45



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QV DEVICE NAME: FFSD1065B-F085

PACKAGE: DPAK

RMS: U87005

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 100% max rated V	1008hrs	0/231
HTSL	JESD22-A103	Ta= 175°C	1008hrs	0/231
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °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=2min	15000cycs	0/231
SD	JSTD002	Ta = 245°C, 5 sec		0/45

QV DEVICE NAME: NTD600N80S3Z

PACKAGE: DPAK

RMS: U87696/U90644/U91555/U93321

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 100% 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
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/308
TC+PC	JESD22-A104	Ta= -55°C to +150°C	1000cycs	0/77
HAST+PC	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/77
UHAST+PC	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/77
IOL+PC	MIL STD750, M 1037	Ta=+25°C, delta Tj=100°C max, Ton=Toff=2 min	15000cycs	0/77
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
FCD1300N80Z	NTD600N80S3Z
FCD2250N80Z	NTD600N80S3Z
FCD260N65S3	NTD600N80S3Z
FCD3400N80Z	NTD600N80S3Z



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FCD360N65S3R0	NTD600N80S3Z
FCD380N60E	NTD600N80S3Z
FCD4N60TM	NTD600N80S3Z
FCD5N60TM	NTD600N80S3Z
FCD5N60TM-WS	NTD600N80S3Z
FCD600N60Z	NTD600N80S3Z
FCD600N65S3R0	NTD600N80S3Z
FCD620N60ZF	NTD600N80S3Z
FCD7N60TM	NTD600N80S3Z
FCD7N60TM-WS	NTD600N80S3Z
FCD850N80Z	NTD600N80S3Z
FCD900N60Z	NTD600N80S3Z
FDD10AN06A0	FQD6N40CTM-NBEA002
FDD120AN15A0	FQD6N40CTM-NBEA002
FDD13AN06A0	FQD6N40CTM-NBEA002
FDD1600N10ALZ	FQD6N40CTM-NBEA002
FDD16AN08A0	FQD6N40CTM-NBEA002
FDD2572	FQD6N40CTM-NBEA002
FDD2582	FQD6N40CTM-NBEA002
FDD2670	FQD6N40CTM-NBEA002
FDD306P	FQD6N40CTM-NBEA002
FDD3670	FQD6N40CTM-NBEA002
FDD3672	FQD6N40CTM-NBEA002
FDD3682	FQD6N40CTM-NBEA002
FDD3690	FQD6N40CTM-NBEA002
FDD3860	FQD6N40CTM-NBEA002
FDD390N15A	FQD6N40CTM-NBEA002
FDD390N15ALZ	FQD6N40CTM-NBEA002
FDD4243	FQD6N40CTM-NBEA002
FDD4685	FQD6N40CTM-NBEA002
FDD5353	FQD6N40CTM-NBEA002
FDD5680	FQD6N40CTM-NBEA002
FDD6637	FQD6N40CTM-NBEA002
FDD6685	FQD6N40CTM-NBEA002



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FDD8444	FQD6N40CTM-NBEA002
FDD8447L	FQD6N40CTM-NBEA002
FDD850N10L	FQD6N40CTM-NBEA002
FDD86102	FQD6N40CTM-NBEA002
FDD86102LZ	FQD6N40CTM-NBEA002
FDD86110	FQD6N40CTM-NBEA002
FDD86113LZ	FQD6N40CTM-NBEA002
FDD86250	FQD6N40CTM-NBEA002
FDD86252	FQD6N40CTM-NBEA002
FDD86326	FQD6N40CTM-NBEA002
FDD86540	FQD6N40CTM-NBEA002
FDD8880	FQD6N40CTM-NBEA002
FDD8896	FQD6N40CTM-NBEA002
FFSD0665A	FFSD1065B-F085
FFSD0665B	FFSD1065B-F085
FFSD08120A	FFSD1065B-F085
FFSD0865B	FFSD1065B-F085
FFSD10120A	FFSD1065B-F085
FFSD1065A	FFSD1065B-F085
FFSD1065B	FFSD1065B-F085
FFSD2065B	FFSD1065B-F085
FJD5304DTF	KSC5502DTM
FJD5553TM	KSC5502DTM
FJD5555TM	KSC5502DTM
FQD12N20LTM	FQD6N40CTM-NBEA002
FQD16N25CTM	FQD6N40CTM-NBEA002
FQD5N60CTM	FQD6N40CTM-NBEA002
FQD1N80TM	FQD6N40CTM-NBEA002
NTD280N60S5Z	NTD600N80S3Z
FQD2N100TM	FQD6N40CTM-NBEA002
FDD4141	FQD6N40CTM-NBEA002
RFD16N06LESM9A	RFD16N05SM9A
RFD16N05SM9A	RFD16N05SM9A
RFD14N05SM9A	RFD16N05SM9A



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RFD14N05LSM9A	RFD16N05SM9A
RFD14N05LSM	RFD16N05SM9A
RFD12N06RLESM9A	RFD16N05SM9A
NTD600N80S3Z	NTD600N80S3Z
NTD360N80S3Z	NTD600N80S3Z
NTD360N65S3H	NTD600N80S3Z
NTD250N65S3H	NTD600N80S3Z
MJD50TF	KSC5502DTM
KSC5502DTM	KSC5502DTM
HUF75329D3ST	RFD16N05SM9A
HUF75321D3ST	RFD16N05SM9A