ON Semiconductor



Final Product/Process Change Notification Document # : FPCN20802Z

Issue Date: 25 February 2015

Title of Change:			Q	Qualification of Sumitomo mold compound from G700HC to G700HF							
Proposed first ship date:			p date: 2	25 February 2016							
Contact information:				Contact your local ON Semiconductor Sales Office or Mohd Hezri Abu Bakar < <u>MohdHezri.AbuBakar@onsemi.com</u> >							
Samples:				Contact your local ON Semiconductor Sales Office or Ahmad Faris Dzulkipli < <u>AhmadFaris.Dzulkipli@onsemi.com</u> >							
Additional Reliability Data:				Contact your local ON Semiconductor Sales Office or Chean Ching Sim < <u>cheanching.sim@onsemi.com</u> >							
Type of notification:			pi O	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change. ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <pcn.support@onsemi.com>.</pcn.support@onsemi.com>							
Change Part Identification:				Affected parts will be identified with a date code of WW20'15 or later							
Change category(s): Wafer Fab Change Ssembly Change Test Change				 Product specific change Manufacturing Site Change/Addition Datasheet/Product Doc change Manufacturing Process Change Shipping/Packaging/Marking Atterial Change Other: 							
Sites Affected: All site(s) not applicable X ON Semiconductor site(s) : External Foundry/Subcon site											
Description and Purpose: To notify customers of the change in mold compound on selected devices in DPAK package from Sumitomo G700HC to G700HF. The change is to improve delamination at post area.										HC to G700HF.	
Reliability Data Summary:											
	#	Test	Name	Test Condition	Read points	NTDV20N06T4G	NVD5490NLT4G	NVD5117PLT4G	NVD6824NLT4G		
	1	AC-PC	Autoclave + PC	121°C/100% RH/15psig	96 Hrs	NA	0/84	0/84	0/84		
	2	тс-рс	Temperature Cycli PC	^{ng +} Ta = -55/150° C	1000 Cyc	0/84	0/84	0/84	0/84		
	3	UHAST-PC	Unbias High Accelerated Stress Test + PC	121°C/100% RH/15psig	96 Hrs	0/84	NA	NA	NA		
	4	HAST-PC	Highly Accelerated Stress Test + PC	Ta= +130° C , RH = 85%, PSIG= 18.8,	96 Hrs	NA	NA	0/84	NA		

5

6

7 HTRB

8

9

10

H3TRB – PC

IOL-PC

HTGB

HTSL

RSH

High Humidity High

Operating Life + PC High Temp Reverse

High Temp Gate Bias

High Temperature

Storage Life Resistance to Solder

Temp Rev Bias +

Preconditioning

Intermittent

Bias

Heat

Ta=85°C, 85% RH,

max Ta=+25°C, delta

Tj=100°C

TA = 175°C

TA = 175°C

Ta = 175° C

260 C Immersion

80% rated or 100V

1008 Hrs

15000 Cyc

1008 Hrs

1008 Hrs

1008 Hrs

Result

0/84

0/84

0/84

0/84

0/84

0/30

0/84

0/84

0/84

0/84

0/84

0/30

NA

0/84

0/84

0/84

0/84

0/30

0/84

0/84

0/84

0/84

0/84

0/30



Electrical Characteristic Summary:

No changes in electrical characteristics. All electrical performance meets the current datasheet specifications.

List of affected Standard Parts:							
NTDV58	304NT4G	NVD5867NLT4G					
NVD480	D4NT4G	NVD5890NT4G					
NVD480	08NT4G	NVD6820NLT4G					
NVD481	LONT4G	NVD6824NLT4G					
NVD511	17PLT4G	NVD6828NLT4G					
NVD580	D2NT4G	SVD5804NT4G					
NVD580)3NT4G	NVD5863NLT4G					
NVD580	06NT4G	NVD5865NLT4G					
NVD580)7NT4G	NVD5862NT4G					