ON Semiconductor



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20605

Generic Copy

Issue Date: 08-Aug-2014

TITLE: Qualification of G700LS Mold Compound in SMB

PROPOSED FIRST SHIP DATE: 08-Nov-2014

AFFECTED CHANGE CATEGORY(S): Assembly

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Siti Nurhaza Mohd Ramli <<u>fg4m6z@onsemi.com</u>> or <<u>Eben.Lim@onsemi.com</u>>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or <<u>cheanching.sim@onsemi.com</u> > or <<u>nicky.siu@onsemi.com</u>>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days 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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

The list of devices in this PROCESS CHANGE NOTICE have been qualified by ON Semiconductor in Seremban Malaysia to use an alternate mold compound G700LS for assured supply and manufacturing flexibility.

G700LS mold compound is already in production at ON Semiconductor for numerous packages including several DFN type packages, SSOP and TSSOP type packages, as well as some SO8FL, Micro 8 and SOIC 16 type packages.

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RELIABILITY DATA SUMMARY:

Reliability Test Results:

NRVBS3200T3G

Test:	Conditions:	Interval:	Results
Autoclave	Ta =121°C RH=100% 15 psig	96 hrs	0/252
TC	Ta = -65°C to 150°C	1000 cycles	0/252
H3TRB	Ta = 85°C RH=85%	1008 hrs	0/252
	Bias = 80% rated V or 100V Max		
IOL	Ta = 25°C, Delta TJ = 100°C,	15000 cycles	0/252
	Ton/off = 5 min.		
HTRB	Ta = 90°C 80% Rated Voltage	1008 hrs	0/252
HTSL	Ta = 150°C	1008 hrs	0/252
RSH	Ta = 260°C, 10 sec dwell		0/90
Solderability	Steam Aging = 8hrs	8 hrs	0/45

1SMB5919BT3G

Test:	Conditions:	Interval:	Results
Autoclave	Ta =121°C RH=100% 15 psig	96 hrs	0/84
TC	Ta = -65°C to 150°C	1000 cycles	0/84
H3TRB	Ta = 85°C RH=85%	1008 hrs	0/84
	Bias = 80% rated V or 100V Max		
IOL	Ta = 25°C, Delta TJ = 100°C,	15000 cycles	0/84
	Ton/off = 5 min.		
HTRB	Ta = 150°C 80% Rated Voltage	1008 hrs	0/84
HTSL	Ta = 150°C	1008 hrs	0/84
RSH	Ta = 260°C, 10 sec dwell		0/30
Solderability	Steam Aging = 8hrs	8 hrs	0/15

ELECTRICAL CHARACTERISTIC SUMMARY:

No change in electrical performance.

CHANGED PART IDENTIFICATION:

The change will be identified by date code. Units with date code 1449 or later may be assembled with G700LS mold compound.

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List of affected General Parts:

1SMB5913BT3G	MBRS260T3H
1SMB5914BT3G	MBRS2H100T3G
1SMB5915BT3G	MBRS3200T3G
1SMB5916BT3G	MBRS360BT3G
1SMB5917BT3G	NBRS2H100T3G
1SMB5918BT3G	NRVBS130T3G
1SMB5919BT3G	NRVBS2040LT3G
MBRS1100T3G	NRVBS240LT3G
MBRS1100T3H	NRVBS260T3G
MBRS120T3G	NRVBS3200T3G
MBRS120T3H	NRVBS360BT3G
MBRS130LT3G	NRVBSS24T3G
MBRS130LT3H	NRVBSS26T3G
MBRS130T3G	SBRS5641T3G
MBRS130T3H	SBRS5654T3G
MBRS140T3G	SBRS81100T3G
MBRS140T3H	SBRS8120T3G
MBRS1540T3G	SBRS8130LT3G
MBRS190T3G	SBRS8140T3G
MBRS190T3H	SBRS8190T3G
MBRS2040LT3G	SS22T3G
MBRS2040LT3H	SS24T3G
MBRS230LT3G	SS24T3H
MBRS240LT3G	SS26T3G
MBRS240LT3H	SS26T3H
MBRS260T3G	