

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION # 20386A

Generic Copy

Issue Date: 13-Mar-2014

<u>TITLE</u>: Qualification of ON Semiconductor Vietnam (OSV) for the Assembly and Test of Schottky rectifier and SCR in DPAK package.

PROPOSED FIRST SHIP DATE: 13-Jun-2014

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly & Test

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or following contact Product Engineers: Raja Roziah <u>Raja.Roziah.Rahmat@onsemi.com</u>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Reliability Engineer Chean Ching Sim <<u>cheanching.sim@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:

This FPCN announces the planned capacity expansion of ON Semiconductor's assembly and test operations of DPAK discrete packaged products, currently built at ON Semiconductor Seremban, Malaysia facility to ON Semiconductor Vietnam (OSV).

Upon the expiration of this FPCN, Schottky Rectifier and SCR devices may be processed at either location. These products have been qualified to commodity/commercial requirements. These products will continue being Pb-free, Halide free and RoHS compliant.

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RELIABILITY DATA SUMMARY:

Reliability Test Results:

Device MBRD5H100T4G

Test:	Conditions:	Interval:	Results
HTRB	Ta=90°C 80% Rated Voltage	1008 hrs	0/84
Autoclave	Ta=121°C RH=100% 15 psig	96 hrs	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,	15,000 cycles	0/84
	Ton/off = 2 min.		
тс	Ta= -65°C to 150°C	1000 cycles	0/84
HTSL	Ta = 150°C	1008 hrs	0/84
RSH	Ta=260°C, 10 sec dwell		0/30
Solderability	Ta=245°C, 10 sec dwell		0/15

Device MCR12DSNT4G

Test:	Conditions:	Interval:	Results
HTRB	Ta=100°C 80% Rated Voltage	1008 hrs	0/252
HTFB	Ta=100°C 80% Rated Voltage	1008 hrs	0/84
Autoclave	Ta=121°C RH=100% 15 psig	96 hrs	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,	15,000 cycles	0/252
	Ton/off = $2 \min$.		
тс	Ta= -65°C to 150°C	1000 cycles	0/252
HTSL	Ta = 150°C	1008 hrs	0/252
RSH	Ta=260°C, 10 sec dwell		0/90
Solderability	Ta=245°C, 10 sec dwell		0/45

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ELECTRICAL CHARACTERISTIC SUMMARY:

There are no changes in electrical characteristics; product performance meets data sheet specifications. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Product from On Semiconductor Vietnam will be marked with site code VN prior to date code

List of affected General Parts:

MBRD1035CTLG MBRD1035CTLT4G MBRD1045T4G MBRD320G MBRD320RLG MBRD320RLH MBRD320T4G MBRD320T4H MBRD330G MBRD330RLG MBRD330T4G MBRD340G MBRD340RLG MBRD350G MBRD350RLG MBRD350T4G MBRD360G MBRD360RLG MBRD360T4G MBRD5H100T4G MBRD620CTT4G MBRD630CTT4G MBRD640CTT4G

MBRD640CTT4H MBRD650CTG MBRD660CTG MBRD660CTRLG MBRD660CTT4G MBRD660CTT4H MBRD835LG MBRD835LT4G MBRD835LT4H MBRD835LT4H