

### 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 Raja.Roziah.Rahmat@onsemi.com

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 <a href="mailto:cheanching.sim@onsemi.com">cheanching.sim@onsemi.com</a>

#### **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.	·	
TC	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 = $2 \text{ min.}$	-	
TC	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	MBRD340RLG	MBRD640CTT4H
MBRD1035CTLT4G	MBRD340T4G	MBRD650CTG
MBRD1045T4G	MBRD350G	MBRD650CTT4G
MBRD320G	MBRD350RLG	MBRD660CTG
MBRD320RLG	MBRD350T4G	MBRD660CTRLG
MBRD320RLH	MBRD360G	MBRD660CTT4G
MBRD320T4G	MBRD360RLG	MBRD660CTT4H
MBRD320T4H	MBRD360T4G	MBRD835LG
MBRD330G	MBRD5H100T4G	MBRD835LT4G
MBRD330RLG	MBRD620CTT4G	MBRD835LT4H
MBRD330T4G	MBRD630CTT4G	MBRD835LT4H
MBRD340G	MBRD640CTT4G	

# **List of affected Customer Specific Parts:**

SCR12DCMT4G

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