

Generic Copy

Issue Date: 17-Sep-2013

<u>TITLE:</u> Qualification of ON Semiconductor Vietnam for Assembly/Test of SMB (Zener, Power Schottky and Ultrafast Rectifiers).

PROPOSED FIRST SHIP DATE: 17-Dec-2013

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly Location

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor sales office or Jason Choy <<u>jason.choy@onsemi.com</u>> for Zener or Raja Roziah Raja Rahmat <<u>Raja.Roziah.Rahmat@onsemi.com</u>> for Power Schottky and Ultrafast Rectifiers.

SAMPLES: Contact your ON local Semiconductor Sales Office or Jason Choy <jason.choy@onsemi.com> for Zener Raja Roziah Raja Rahmat or <Raja.Roziah.Rahmat@onsemi.com> for Power Schottky and Ultrafast Rectifiers.

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Chean Ching Sim cheanching.sim@onsemi.com

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCN 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 30days 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 SMB discrete packaged products, currently built at ON Semiconductor Seremban facility to ON Semiconductor Vietnam (OSV).

Upon the expiration of this FPCN, Zener, Power Schottky and Ultrafast Rectifiers 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. As part of this planned capacity expansion, ON Semiconductor has qualified a more automated manufacturing process. As a result of this automated process, die polarity orientation for Zener devices could occur cathode or anode to leadframe. Final product polarity will be determined at 100% final electrical test and cathode polarity band will be laser marked at that time on the package.

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RELIABILITY DATA SUMMARY:

P6SMB91AT3G

Test	Conditions	Interval	Result
Autoclave	Ta : 121C, RH: 100%, Pressure : 15Psig	96hrs	0/84
H3TRB	Ta=85°C, 85% RH, 80% rated or 100V max	504hrs	0/84
HTRB	Ta: 90C, Tj Max: 150C, Tj: 150C	504hrs	0/84
HTSL	Ta: 150C	504hrs	0/84
IOL	Ta=25°C, delta Tj=100°C On/off = 2 min	7500cyc	0/84
RSH	260 C Immersion		0/30
Solderability	Steam Aging: 8hrs	8 hrs	0/15
TC	$Ta = -65/150^{\circ} C$	1000cyc	0/84

P6SMB200AT3G

Test	Conditions	Interval	Result
Autoclave	Ta: 121C, RH: 100%, Pressure: 15Psig	96hrs	0/84
H3TRB	Ta=85°C, 85% RH, 80% rated or 100V max	504hrs	0/84
HTRB	Ta: 90C, Tj Max: 150C, Tj: 150C	504hrs	0/84
HTSL	Ta: 150C	504hrs	0/84
IOL	Ta=25°C, delta Tj=100°C On/off = 2 min	7500cyc	0/84
RSH	260 C Immersion	_	0/30
Solderability	Steam Aging: 8hrs	8 hrs	0/15
TC	Ta = -65/150° C	1000cyc	0/84

MBRS3200T3G

Test	Conditions	Interval	Result
Autoclave	Ta: 121C, RH: 100%, Pressure: 15Psig	96hrs	0/84
H3TRB	Ta=85°C, 85% RH, 80% rated or 100V max	504hrs	0/84
HTRB	Ta: 90C, Tj Max: 150C, Tj: 150C	504hrs	0/84
HTSL	Ta: 150C	504hrs	0/84
IOL	Ta=25°C, delta Tj=100°C On/off = 2 min	7500cyc	0/84
RSH	260 C Immersion		0/30
Solderability	Steam Aging: 8hrs	8 hrs	0/15
TC	Ta = -65/150° C	1000cyc	0/84

MURS360BT3G

Test	Conditions	Interval	Result
Autoclave	Ta : 121C, RH: 100%, Pressure : 15Psig	96hrs	0/84
H3TRB	Ta=85°C, 85% RH, 80% rated or 100V max	504hrs	0/84
HTRB	Ta: 90C, Tj Max: 150C, Tj: 150C	504hrs	0/84
HTSL	Ta: 150C	504hrs	0/84
IOL	Ta=25°C, delta Tj=100°C On/off = 2 min	7500cy	0/84
RSH	260 C Immersion	-	0/30
Solderability	Steam Aging: 8hrs	8 hrs	0/15
TC	$Ta = -65/150^{\circ} C$	1000cyc	0/84

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ELECTRICAL CHARACTERISTIC SUMMARY:

Product performance meets data sheet specification.

CHANGED PART IDENTIFICATION:

Devices sourced from OSV in Vietnam will carry the site code "VN" at the bottom of the package.

List of affected General Parts:

1SMB100AT3G	1SMB15AT3G	1SMB28AT3G
1SMB10AT3G	1SMB160AT3G	1SMB30AT3G
1SMB110AT3G	1SMB16AT3G	1SMB33AT3G
1SMB11AT3G	1SMB170AT3G	1SMB36AT3G
1SMB120AT3G	1SMB17AT3G	1SMB40AT3G
1SMB12AT3G	1SMB18AT3G	1SMB43AT3G
1SMB130AT3G	1SMB20AT3G	1SMB45AT3G
1SMB13AT3G	1SMB22AT3G	1SMB48AT3G
1SMB14AT3G	1SMB24AT3G	1SMB5.0AT3G
1SMB150AT3G	1SMB26AT3G	1SMB51AT3G
1SMB54AT3G	1SMB58AT3G	1SMB5913BT3G
1SMB5914BT3G	1SMB5924BT3G	1SMB5934BT3G
1SMB5915BT3G	1SMB5925BT3G	1SMB5935BT3G
1SMB5916BT3G	1SMB5926BT3G	1SMB5936BT3G
1SMB5917BT3G	1SMB5927BT3G	1SMB5937BT3G
1SMB5918BT3G	1SMB5928BT3G	1SMB5938BT3G
1SMB5919BT3G	1SMB5929BT3G	1SMB5939BT3G
1SMB5920BT3G	1SMB5930BT3G	1SMB5940BT3G
1SMB5921BT3G	1SMB5931BT3G	1SMB5941BT3G
1SMB5922BT3G	1SMB5932BT3G	1SMB5942BT3G
1SMB5923BT3G	1SMB5933BT3G	1SMB5943BT3G
1SMB5944BT3G	1SMB5948BT3G	1SMB5953BT3G
1SMB5945BT3G	1SMB5949BT3G	1SMB5954BT3G
1SMB5946BT3G	1SMB5951BT3G	1SMB5955BT3G
1SMB5947BT3G	1SMB5952BT3G	1SMB5956BT3G
1SMB6.0AT3G	1SMB7.5AT3G	1SMB8.5AT3G
1SMB6.5AT3G	1SMB70AT3G	1SMB85AT3G
1SMB60AT3G	1SMB75AT3G	1SMB9.0AT3G
1SMB64AT3G	1SMB8.0AT3G	1SMB90AT3G
1SMB7.0AT3G	NSB12ANT3G	P6SMB100AT3G
P6SMB10AT3G	P6SMB18AT3G	P6SMB39AT3G
P6SMB120AT3G	P6SMB200AT3G	P6SMB43AT3G
P6SMB12AT3G	P6SMB20AT3G	P6SMB47AT3G
P6SMB130AT3G	P6SMB22AT3G	P6SMB51AT3G

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P6SMB13AT3G	P6SMB24AT3G	P6SMB56AT3G
P6SMB150AT3G	P6SMB27AT3G	P6SMB6.8AT3G
P6SMB15AT3G	P6SMB30AT3G	P6SMB62AT3G
P6SMB160AT3G	P6SMB30SAT3G	P6SMB68AT3G
P6SMB16AT3G	P6SMB33AT3G	P6SMB7.5AT3G
P6SMB180AT3G	P6SMB36AT3G	P6SMB75AT3G
P6SMB8.2AT3G	P6SMB82AT3G	P6SMB9.1AT3G
P6SMB91AT3G	MURS110T3G	MURS115T3G
MURS220T3G	MURS120T3H	MBRS130T3G
MURS140T3G	MURS160T3G	MBRS140T3G
MURS260T3G	MURS140T3H	MBRS120T3H
MURS240T3G	MURS160T3H	MBRS130T3H
MBRS1540T3G	MURS205T3G	MBRS140T3H
SS24T3G	MURS210T3G	MBRS130LT3G
MBRS230LT3G	MURS230T3G	MBRS130LT3H
MURHS160T3G	SS22T3G	MBRS260T3G
MURS105T3G	SS24T3H	SS26T3G
MURS120T3G	MBRS120T3G	MBRS2040LT3G
MBRS190T3G	MBRS2040LT3H	MBRS260T3H
MBRS1100T3G	MBRS1100T3H	SS26T3H
MBRS240LT3G	MBRS190T3H	MBRS3200T3G
MBRS360BT3G	MBRS240LT3H	MURS360BT3G

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