



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20425A

Generic Copy

Issue Date: 29-Aug-2014

TITLE: Final Notification of SOD-123 package/devices qualification for assembly & test in Leshan, China

PROPOSED FIRST SHIP DATE: 01-Mar-2015

AFFECTED CHANGE CATEGORY(S): Assembly and test site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or < jian.peng@onsemi.com >

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or <MohdAzizi.Azman@onsemi.com >

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:

ON Semiconductor is notifying customers of the qualification and transfer of SOD-123 package assembly and test site from Seremban facility to Leshan facility.

The Leshan facility is certified with ISO/TS 16949:2009 and is currently running production for SOD-123.

The bill of materials used in the SOD-123 package will remain the same between both ON Semiconductor's Seremban and Leshan's facilities.

Reliability qualification and full electrical characterization over temperature has been performed to ensure device functionality and electrical specifications are met.



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RELIABILITY DATA SUMMARY:

Qual Vehicles: Cu Wire

MMSZ5270BT1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/240
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/240
HTSL	Ta=150C	1512 hrs	0/240
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/240
TempCycle	Ta= -65/150C	2000 cyc	0/240
RSH	Ta=260C, 10 sec, elec test		0/90
Solderabilitiy	Ta = 245C, 10 sec		0/45
DPA	per AEC Q101 post TC 1K cyc		0/6
DPA	per AEC Q101 post H3TRB 1008 hrs		0/6

MBR0540T1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/160
HTRB	Ta=90C,80% Rated Voltage	1008 hrs	0/160
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/160
HTSL	Ta=150C	1512 hrs	0/160
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/160
TempCycle	Ta= -65/150C	2000 cyc	0/160
RSH	Ta=260C, 10 sec, elec test		0/60
Solderabilitiy	Ta = 245C, 10 sec		0/30
DPA	per AEC Q101 post TC 1K cyc		0/4
DPA	per AEC Q101 post H3TRB 1008 hrs		0/4

MBR130T1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=90C,80% Rated Voltage	1008 hrs	0/84
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/84
HTSL	Ta=150C	1512 hrs	0/84
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/84
TempCycle	Ta= -65/150C	2000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderabilitiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC 1K cyc		0/2
DPA	per AEC Q101 post H3TRB 1008 hrs		0/2



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BAT54T1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/240
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/240
HTSL	Ta=150C	1512 hrs	0/240
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/240
TempCycle	Ta= -65/150C	2000 cyc	0/240
RSH	Ta=260C, 10 sec, elec test		0/90
Solderabilitiy	Ta = 245C, 10 sec		0/45
DPA	per AEC Q101 post TC 1K cyc		0/6
DPA	per AEC Q101 post H3TRB 1008 hrs		0/6

MMSD103T1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/240
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/240
HTSL	Ta=150C	1512 hrs	0/240
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/240
TempCycle	Ta= -65/150C	2000 cyc	0/240
RSH	Ta=260C, 10 sec, elec test		0/90
Solderabilitiy	Ta = 245C, 10 sec		0/45
DPA	per AEC Q101 post TC 1K cyc		0/6
DPA	per AEC Q101 post H3TRB 1008 hrs		0/6

MMSZ9V1T1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/240
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/240
HTSL	Ta=150C	1512 hrs	0/240
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/240
TempCycle	Ta= -65/150C	2000 cyc	0/240
RSH	Ta=260C, 10 sec, elec test		0/90
Solderabilitiy	Ta = 245C, 10 sec		0/45
DPA	per AEC Q101 post TC 1K cyc		0/6
DPA	per AEC Q101 post H3TRB 1008 hrs		0/6



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Qual Vehicles: Au Wire

SZMMSZ5270BT1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/240
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/240
H3TRB+PC	Ta=85 C RH=85% bias=80% rated V or100V Max	1008 hrs	0/240
HTSL	Ta=150C	1008 hrs	0/240
IOL	Ta=25C, delta TJ = 100C Ton=Toff = 2min	15000 cyc	0/240
TempCycle	Ta= -65/150C	1000 cyc	0/240
RSH	Ta=260C, 10 sec, elec test		0/90
Solderabilitiy	Ta = 245C, 10 sec		0/45
DPA	per AEC Q101 post TC 1K cyc		0/6
DPA	per AEC Q101 post H3TRB 1008 hrs		0/6

NSI45030AT1G

Test:	Conditions:	Interval:	Results
Autoclave	Ta=121C, RH=100%, ~15psig	96 hrs	0/160
HTOL	Tj=150C,VDS=7.5V	1008 hrs	0/160
HTSL	Ta=150C	1008 hrs	0/160
TempCycle	Ta= -65/150C	1000 cyc	0/160
RSH	Ta=260C, 10 sec, elec test		0/60
Solderabilitiy	Ta = 245C, 10 sec		0/30
DPA	per AEC Q101 post TC 1K cyc		0/4
DPA	per AEC Q101 post H3TRB 1008 hrs		0/4

ELECTRICAL CHARACTERISTIC SUMMARY:

Available upon request

CHANGED PART IDENTIFICATION:

Affected products from ON semiconductor with date code 1510 representing WW10, 2015 and greater may be sourced from either the Seremban factory or the Leshan factory.



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List of affected General Parts:

NRVB0530T1G	SZMMSZ33T3G	SZMMSZ5232ET1G
NRVB0530T3G	SZMMSZ36T1G	SZMMSZ5233BT1G
NRVB0540T1G	SZMMSZ39T1G	SZMMSZ5234BT1G
NRVB0540T3G	SZMMSZ3V0T1G	SZMMSZ5235BT1G
NRVB130T1G	SZMMSZ3V3T1G	SZMMSZ5235ET1G
NRVB130T3G	SZMMSZ3V6T1G	SZMMSZ5236BT1G
NSV45015WT1G	SZMMSZ3V9T1G	SZMMSZ5237BT1G
NSV45020AT1G	SZMMSZ43T1G	SZMMSZ5237ET1G
NSV45020T1G	SZMMSZ4678T1G	SZMMSZ5238BT1G
NSV45025T1G	SZMMSZ4679T1G	SZMMSZ5239BT1G
NSV45030AT1G	SZMMSZ4680ET1G	SZMMSZ5240BT1G
NSV50010YT1G	SZMMSZ4680T1G	SZMMSZ5241BT1G
S1ZMMSZ5V1T1G	SZMMSZ4681T1G	SZMMSZ5242BT1G
SBAT54T1G	SZMMSZ4682T1G	SZMMSZ5242BT3G
SBR80520LT1G	SZMMSZ4683T1G	SZMMSZ5242ET1G
SBR80520LT3G	SZMMSZ4684T1G	SZMMSZ5243BT1G
SMMSD103T1G	SZMMSZ4685T1G	SZMMSZ5244BT1G
SMMSD301T1G	SZMMSZ4686T1G	SZMMSZ5244ET1G
SMMSD4148T1G	SZMMSZ4687T1G	SZMMSZ5245BT1G
SMMSD4148T3G	SZMMSZ4688T1G	SZMMSZ5245ET1G
SMMSD701T1G	SZMMSZ4688T3G	SZMMSZ5246BT1G
SMMSD914T1G	SZMMSZ4689ET1G	SZMMSZ5246ET1G
SMMSD914T3G	SZMMSZ4689T1G	SZMMSZ5247BT1G
SMMSZ4688T1G	SZMMSZ4689T3G	SZMMSZ5248BT1G
SMMSZ4689ET1G	SZMMSZ4690ET1G	SZMMSZ5248ET1G
SMMSZ4689T1G	SZMMSZ4690ET3G	SZMMSZ5249BT1G
SMMSZ4690T1G	SZMMSZ4690T1G	SZMMSZ5250BT1G
SMMSZ4698T1G	SZMMSZ4690T3G	SZMMSZ5250ET1G
SMMSZ4701T1G	SZMMSZ4691T1G	SZMMSZ5251BT1G
SMMSZ4704T1G	SZMMSZ4692T1G	SZMMSZ5251ET1G
SMMSZ4711T1G	SZMMSZ4693T1G	SZMMSZ5252BT1G
SMMSZ4713T1G	SZMMSZ4693T3G	SZMMSZ5252ET1G
SMMSZ5252BT1G	SZMMSZ4694T1G	SZMMSZ5252ET3G
SMMSZ5252ET1G	SZMMSZ4694T3G	SZMMSZ5253BT1G
SMMSZ5254BT1G	SZMMSZ4696T1G	SZMMSZ5253ET1G
SMMSZ5256BT1G	SZMMSZ4697T1G	SZMMSZ5254BT1G
SMMSZ5260BT1G	SZMMSZ4698T1G	SZMMSZ5254ET1G
SMSD1002T1G	SZMMSZ4699T1G	SZMMSZ5255BT1G
SMSZ1600-31T3G	SZMMSZ4700T1G	SZMMSZ5256BT1G
SMSZ1600-35T3DSG	SZMMSZ4701ET1G	SZMMSZ5256ET1G
SMSZ4688ST1G	SZMMSZ4701T1G	SZMMSZ5257BT1G
SZMMSZ10T1G	SZMMSZ4702T1G	SZMMSZ5257ET1G
SZMMSZ10T3G	SZMMSZ4703T1G	SZMMSZ5258BT1G
SZMMSZ11T1G	SZMMSZ4704T1G	SZMMSZ5258BT3G
SZMMSZ12T1G	SZMMSZ4704T3G	SZMMSZ5258ET1G
SZMMSZ12T3G	SZMMSZ4705T1G	SZMMSZ5259BT1G
SZMMSZ13ET1G	SZMMSZ4708T1G	SZMMSZ5260BT1G
SZMMSZ13T1G	SZMMSZ4709T1G	SZMMSZ5261BT1G
SZMMSZ15ET1G	SZMMSZ4711T1G	SZMMSZ5261BT3G
SZMMSZ15T1G	SZMMSZ4711T3G	SZMMSZ5262BT1G
SZMMSZ16T1G	SZMMSZ4713T1G	SZMMSZ5263BT1G
SZMMSZ18ET1G	SZMMSZ4714T1G	SZMMSZ5264BT1G
SZMMSZ18T1G	SZMMSZ4715T1G	SZMMSZ5265BT1G
SZMMSZ20T1G	SZMMSZ4717T1G	SZMMSZ5266BT1G
SZMMSZ22T1G	SZMMSZ47T1G	SZMMSZ5267BT1G
SZMMSZ24T1G	SZMMSZ4V3T1G	SZMMSZ5268BT1G
SZMMSZ24T3G	SZMMSZ4V7T1G	SZMMSZ5270BT1G
SZMMSZ27ET1G	SZMMSZ5221BT1G	SZMMSZ5272BT3G



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SZMMSZ27T1G
SZMMSZ27T3G
SZMMSZ2V4T1G
SZMMSZ2V4T3G
SZMMSZ2V7ET1G
SZMMSZ2V7T1G
SZMMSZ30T1G
SZMMSZ33ET1G
SZMMSZ33ET3G
SZMMSZ33T1G

SZMMSZ5222BT1G
SZMMSZ5223BT1G
SZMMSZ5225BT1G
SZMMSZ5226BT1G
SZMMSZ5227BT1G
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SZMMSZ5230BT1G
SZMMSZ5231BT1G
SZMMSZ5232BT1G

SZMMSZ5300T1G
SZMMSZ56T1G
SZMMSZ5V1T1G
SZMMSZ5V6T1G
SZMMSZ6V2T1G
SZMMSZ6V8T1G
SZMMSZ7V5T1G
SZMMSZ8V2ET1G
SZMMSZ8V2T1G
SZMMSZ9V1T1G