



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20425

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: 06-Dec-2014

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 or 100V 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
Solderability	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
Solderability	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 1450 representing WW50, 2014 and greater may be sourced from either the Seremban factory or the Leshan factory.



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List of affected General Parts:

BAT54T1G	MMSZ4693T3G	MMSZ5244ET1G
MBR0520LT1G	MMSZ4694T1G	MMSZ5245BT1G
MBR0520LT1H	MMSZ4694T3G	MMSZ5245CT1G
MBR0520LT3G	MMSZ4696T1G	MMSZ5245ET1G
MBR0530T1G	MMSZ4697T1G	MMSZ5246BT1G
MBR0530T1H	MMSZ4698T1G	MMSZ5246ET1G
MBR0530T3G	MMSZ4699T1G	MMSZ5247BT1G
MBR0540T1G	MMSZ4700T1G	MMSZ5247BT3G
MBR0540T1H	MMSZ4701ET1G	MMSZ5248BT1G
MBR0540T3G	MMSZ4701T1G	MMSZ5248CT1G
MBR130T1G	MMSZ4702T1G	MMSZ5249BT1G
MBR130T1H	MMSZ4703T1G	MMSZ5250BT1G
MBR130T3G	MMSZ4704T1G	MMSZ5250CT1G
MMSD103T1G	MMSZ4705T1G	MMSZ5251BT1G
MMSZ10T1G	MMSZ4706T1G	MMSZ5252BT1G
MMSZ11T1G	MMSZ4707T1G	MMSZ5252CT1G
MMSZ12T1G	MMSZ4708T1G	MMSZ5252ET1G
MMSZ13T1G	MMSZ4709T1G	MMSZ5253BT1G
MMSZ15T1G	MMSZ4710T1G	MMSZ5254BT1G
MMSZ16T1G	MMSZ4711T1G	MMSZ5254ET1G
MMSZ18ET1G	MMSZ4713T1G	MMSZ5255BT1G
MMSZ18T1G	MMSZ4714T1	MMSZ5255ET1G
MMSZ18T1H	MMSZ4715T1G	MMSZ5256BT1G
MMSZ18T3G	MMSZ4717T1G	MMSZ5256CT1G
MMSZ20T1G	MMSZ47T1G	MMSZ5256ET1G
MMSZ22T1G	MMSZ47T3G	MMSZ5257BT1G
MMSZ24T1G	MMSZ4V3T1G	MMSZ5257ET1G
MMSZ27T1G	MMSZ4V7T1G	MMSZ5258BT1G
MMSZ27T3G	MMSZ51T1G	MMSZ5258BT3G
MMSZ2V4T1G	MMSZ5221BT1G	MMSZ5259BT1G
MMSZ2V7T1G	MMSZ5222BT1G	MMSZ5260BT1G
MMSZ30T1G	MMSZ5223BT1G	MMSZ5261BT1G
MMSZ33T1G	MMSZ5225BT1G	MMSZ5262BT1G
MMSZ36T1G	MMSZ5226BT1G	MMSZ5263BT1G
MMSZ39T1G	MMSZ5226CT1G	MMSZ5264BT1G
MMSZ3V0T1G	MMSZ5227BT1G	MMSZ5265BT1G
MMSZ3V3T1G	MMSZ5228BT1G	MMSZ5266BT1G
MMSZ3V6T1G	MMSZ5229BT1G	MMSZ5267BT1G
MMSZ3V9T1G	MMSZ5230BT1G	MMSZ5268BT1G
MMSZ43T1G	MMSZ5231BT1G	MMSZ5270BT1G
MMSZ4678T1G	MMSZ5231BT3G	MMSZ5272BT3G
MMSZ4679T1G	MMSZ5231CT1G	MMSZ56T1G

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MMSZ4680ET1G	MMSZ5232BT1G	MMSZ5V1T1G
MMSZ4680T1G	MMSZ5232CT1G	MMSZ5V6T1G
MMSZ4681T1G	MMSZ5233BT1G	MMSZ5V6T3G
MMSZ4682T1G	MMSZ5234BT1G	MMSZ6V2T1G
MMSZ4683T1G	MMSZ5235BT1G	MMSZ6V8T1G
MMSZ4684T1G	MMSZ5235BT1H	MMSZ7V5T1G
MMSZ4685T1G	MMSZ5235ET1G	MMSZ8V2ET1G
MMSZ4686T1G	MMSZ5236BT1G	MMSZ8V2T1G
MMSZ4687T1G	MMSZ5237BT1G	MMSZ9V1T1G
MMSZ4688T1G	MMSZ5237ET1G	NSI45015WT1G
MMSZ4688T3G	MMSZ5238BT1G	NSI45020AT1G
MMSZ4689ET1G	MMSZ5239BT1G	NSI45020T1G
MMSZ4689T1G	MMSZ5240BT1G	NSI45025AT1G
MMSZ4689T3G	MMSZ5241BT1G	NSI45025T1G
MMSZ4690T1G	MMSZ5242BT1G	NSI45030AT1G
MMSZ4690T3G	MMSZ5242BT3G	NSI45030T1G
MMSZ4691T1G	MMSZ5242ET1G	NSI50010YT1G
MMSZ4692T1G	MMSZ5243BT1G	
MMSZ4693T1G	MMSZ5244BT1G	