



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20425B

Generic Copy

Issue Date: 08-Nov-2014

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

PROPOSED FIRST SHIP DATE: 08-Feb-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 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 1502 representing WW02, 2015 and greater may be sourced from either the Seremban factory or the Leshan factory.

List of affected General Parts:

MMSZ4714T1G