

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20487ZA

Generic Copy

Issue Date: 06-Jan-2015

<u>TITLE:</u> Final Notification of SOT-553 and SOT- 563 package/devices qualification for Assembly & Test in Leshan, China

PROPOSED FIRST SHIP DATE: 25-Sep-2015

AFFECTED CHANGE CATEGORY(S): Assembly and test site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or < Shero.gao@onsemi.com >

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

First 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 the assembly and test of SOT553 and SOT563 packages from ON Semiconductor Seremban facility to ON Semiconductor Leshan facility.

The ON Semiconductor Leshan facility is certified with ISO/TS 16949:2009.

The bill of materials used in the SOT553 and SOT563 packages 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:

Package: SOT563 Qual Vehicles: Cu Wire

BC847CDXV6T1G

3
3

NST3906DXV6T1G

Test:	Conditions:	Interval:	Results
HAST+PC	Ta=130C, RH=85%, ~18.8psig,	96 hrs	0/78
	bias		
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/78
RSH	Ta=260C, 10 sec, elec test		0/30
DPA	per AEC Q101 post HAST 96 hr	's	0/4

NSV12100XV6T1G

esults
93
78
30
4

NTZD3155CT1H

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HTGB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HAST+PC	Ta=130C RH=85%, ~18.8psig,	96 hrs	0/89
	bias		
HTSL	Ta=150C	1512 hrs	0/89
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
Solderabiltiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC 1K cyc		0/2
DPA	per AEC Q101 post HAST 96 h	rs	0/2

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NUF2230XV6T1G

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HTSL	Ta=150C	1512 hrs	0/89
IOL	Ta=25C, delta TJ = 100C		
	Ton=Toff = 2min	15000 cyc	0/84
TempCycle	Ta= -55/150C	2000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderabiltiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC 1K cyc		0/2
DPA	per AEC Q101 post HAST 96 hrs		0/2

NUP5120X6T1G

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HAST+PC	Ta=130 C RH=85%, ~18.8 psig,	96 hrs	0/89
	bias		
HTSL	Ta=150C	1512 hrs	0/89
TempCycle	Ta= -65/150C	2000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test	-	0/30
Solderability	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC 1K cyc		0/2
DPA	per AEC Q101 post HAST 96 h	rs	0/2

NTZS3151PT1G

Test:	Conditions:	Interval:	Results
HTRB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
HTGB	Ta=150C,80% Rated Voltage	1008 hrs	0/84
Autoclave+PC	Ta=121C, RH=100%, ~15psig	96 hrs	0/84
HAST+PC	Ta130C RH=85%, ~18.8 psig,	96 hrs	0/104
	bias		
IOL	Ta=25C, delta TJ = 100C		
	Ton=Toff = 2min	15000 cyc	0/84
HTSL	Ta=150C	1008 hrs	0/84
TempCycle	Ta= -65/150C	1000 cyc	0/101
RSH	Ta=260C, 10 sec, elec test		0/30
Solderabiltiy	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC 1K cyc		0/2
DPA	per AEC Q101 post HAST 96 h	rs	0/2

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Package: SOT553 Qual Vehicles: Au Wire

NL17SZ126XV5T2G

Test:	Conditions:	Interval:	Results
HTOL	Tj=150C, Vcc=5.5V	1008 hrs	0/84
HAST+PC	Ta130C RH=85%, ~18.8 psig,	96 hrs	0/84
	bias		
UHAST+PC	Ta130C RH=85%, ~18.8 psig,	96 hrs	0/84
	unbias		
HTSL	Ta=150C	1008 hrs	0/84
TempCycle	Ta= -65/150C	1000 cyc	0/84
RSH	Ta=260C, 10 sec, elec test		0/30
Solderability	Ta = 245C, 10 sec		0/15
DPA	per AEC Q101 post TC 500 cy	С	0/2
DPA	per AEC Q101 post HAST 96h	rs	0/5

ELECTRICAL CHARACTERISTIC SUMMARY:

Available upon request

CHANGED PART IDENTIFICATION:

Affected products from ON semiconductor with date code 1539 representing WW39, 2015 and greater may be sourced from either the Seremban factory or the Leshan factory.

List of affected General Parts:

NSV12100XV6T1G	NSVBC114EPDXV6T1G	NSVT3946DXV6T1G
NSVB114YPDXV6T1G	NSVBC114YDXV6T1G	SBAS16DXV6T1G
NSVB123JPDXV6T1G	NSVBC124EDXV6T1G	SBC847BPDXV6T1G
NSVB124XPDXV6T1G	NSVEMC2DXV5T1G	SBC847CDXV6T1G
NSVB143TPDXV6T1G	NSVEMX1DXV6T1G	SNST3904DXV6T5G
NSVB143ZPDXV6T1G	NSVR0320XV6T1G	SNUF2042XV6T1G
NSVB144EPDXV6T1G	NSVT30010MXV6T1G	SZQA6V8XV5T1G
NSVBA114YDXV6T1G	NSVT3904DXV6T1G	NSVEMD4DXV6T5G
NSVBC114EDXV6T1G	NSVT3906DXV6T1G	

List of affected Customer Specific Parts:

STZD3152PT1G STZD3154NT1G STZD3155CT1G STZD3155CT2G

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