

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

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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

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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 h	rs	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

Conditions:	Interval:	Results
Tj=150C, Vcc=5.5V	1008 hrs	0/84
Ta130C RH=85%, ~18.8 psig, bias	96 hrs	0/84
Ta130C RH=85%, ~18.8 psig, unbias	96 hrs	0/84
Ta=150C	1008 hrs	0/84
Ta= -65/150C	1000 cyc	0/84
Ta=260C, 10 sec, elec test		0/30
Ta = 245C, 10 sec		0/15
per AEC Q101 post TC 500 cy	/C	0/2
per AEC Q101 post HAST 96h	nrs	0/5
	Tj=150C, Vcc=5.5V Ta130C RH=85%, ~18.8 psig, bias Ta130C RH=85%, ~18.8 psig, unbias Ta=150C Ta=-65/150C Ta=260C, 10 sec, elec test Ta = 245C, 10 sec per AEC Q101 post TC 500 cy	Tj=150C, Vcc=5.5V 1008 hrs Ta130C RH=85%, ~18.8 psig, bias Ta130C RH=85%, ~18.8 psig, unbias Ta=150C 96 hrs unbias Ta=-65/150C 1008 hrs Ta=-260C, 10 sec, elec test

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:

NSVBC114EPDXV6T1G	NSVT3946DXV6T1G
NSVBC114YDXV6T1G	SBAS16DXV6T1G
NSVBC124EDXV6T1G	SBC847BPDXV6T1G
NSVEMC2DXV5T1G	SBC847CDXV6T1G
NSVEMX1DXV6T1G	SNST3904DXV6T5G
NSVR0320XV6T1G	SNUF2042XV6T1G
NSVT30010MXV6T1G	SZQA6V8XV5T1G
NSVT3904DXV6T1G	NSVEMD4DXV6T5G
NSVT3906DXV6T1G	
	NSVBC114YDXV6T1G NSVBC124EDXV6T1G NSVEMC2DXV5T1G NSVEMX1DXV6T1G NSVR0320XV6T1G NSVT30010MXV6T1G NSVT3904DXV6T1G

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