



FINAL NOTICE - PRODUCT / PROCESS CHANGE
Generic Copy

04-JUL-2001

SUBJECT: Product/Process Change Notification #11148

TITLE: Final Notification for SOT23 CapacityExpansion to PSI

EFFECTIVE DATE: 14-Aug-2001

AFFECTED CHANGE CATEGORY: Subcontractor Assembly Site & Subcontractor Test Site

AFFECTED PRODUCT DIVISION: Bipolar Discrete Products Division

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Jake Lee <R14795@onsemi.com>

SAMPLES: Contact Below

Contact your local ON Semiconductor Sales Office or Bonap Man <RHK649@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Frederic Lavarenne R47476@onsemi.com

DISCLAIMER:

Initial Product/Process Change Notification (IPCEN) - First Notification distributed to customers.
Distributed at least 120 days from the effective date of the change.

Final Product/Process Change Notification (FPCEN) - Final Notification completing the notification process. Distributed at least 60 days from the effective date 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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

ON Semiconductor is pleased to announce Assembly/Test qualification of SOT23 manufacturing at PSI(Pacific Semiconductor Inc.), ON Semiconductor's subcontractor in the Philippines.

This notification affects NPN/PNP General purpose transistors, and Switching diodes. PSI has been both QS9000 and AEC certified and has been producing many technologies in various packages for customers worldwide. This expansion will provide additional flexibility and capacity needed to improve responsiveness and on time delivery to our valuable customers. Process/equipment will be an exact copy of ON Semiconductor's. Therefore, there will be no change to the form, fit, and function of the devices. Parts will continue to meet or exceed ON Semiconductor's reliability standards. Though customers might not be receiving the parts from PSI upon the expiration of FPCEN, it is expected for PSI to build devices in the list below, if necessary, when ON Semiconductor needs additional capacity after the effective date of this FPCEN.



Product/Process Change Notification #11148

QUALIFICATION PLAN:

Reliability Test Vehicles: MMBT3904LT1 and BAS19LT1

Test Desc.	Test condition	Interval	Sample size
Autoclave	Ta=121DegC, P=15psig, RH=100%	96 hours	231
Temp cycle	Ta= -65/150DegC, air to air Dwell >10 mins	1000 cycles	231
High Temp Storage	Ta=150DegC	1008 hours	231
Solder Heat	Ta=260DegC	1X	135
High Temp Reverse Bias	Ta=150DegC, V=rated	1008 hours	231
IOL	Ton=Toff, Ta=25DegC, Delta Tj=100DegC or rated Pd	1008 hours	231
H3TRB	Ta=85DegC, RH=85%, V=80% of rated voltage or 100V depending on whichever is lower.	1008 hours	231

RELIABILITY DATA SUMMARY: Reliability Test Vehicles: MMBT3904LT1 and BAS19LT1
ENVIRONMENTAL TEST SUMMARY

TEST	TEST CONDITIONS	INTERVAL	SAMPLE SIZE	REJECTS		
				CAT	LIM	DEL
Autoclave	Ta=121DegC,P=15psig, RH = 100%	96 hrs	231	0	0	0
		192 hrs	231	0	0	0
Temp Cycle	Ta=-65/150DegC, Air to Air, Dwell > 10 min	500 cyc	231	0	0	0
		1000 cyc	231	0	0	0
High Temp Storage	Ta=150DegC	500 hrs	231	0	0	0
		1000 hrs	231	0	0	0
Solder Heat	Ta=260DegC	1X	135	0	0	0

LIFE TEST SUMMARY

TEST	TEST CONDITIONS		INTERVAL	SAMPLE SIZE	REJECTS		
	Environment	Bias			CAT	LIM	DEL
High Temp Reverse Bias	Ta=150DegC	V=rated	500 hrs	231	0	0	0
			1000 hrs	231	0	0	0
Intermittent Operating Life	Ton=Toff, Ta=25DegC	Delta Tj= 100DegC or rated PD	500 hrs	231	0	0	0
			1000 hrs	231	0	0	0
High Humidity	Ta=85DegC, RH=85%	V=80% of rated voltage	500 hrs	231	0	0	0
High Temp Reverse Bias		or 100V depending on whichever is lower	1000 hrs	231	0	0	0

**Product/Process Change Notification #11148****ELECTRICAL CHARACTERISTIC SUMMARY:**

Data summary shows no significant variation between current assembly sites and PSI.

CHANGED PART IDENTIFICATION:

For site identification purpose, the date code character will be rotated 90 degrees counterclockwise and have a bar on the bottom with respect to the device marking.

ADDITIONAL INFORMATION:**Additional contacts for Notifications:****Sample contact(s) at ON Semiconductor:****Americas**

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Name Frederic Lavarenne
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Phone 33.5.34.61.13.14
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AFFECTED DEVICE LIST (WITHOUT SPECIALS):**PART**

BAS19LT1
BAS20LT1
BAV74LT1
BAV74LT3
BC856ALT1
BC857ALT1
BC857BLT1
BC857BLT3
BC858ALT1
BC858CLT1
BC858CLT3
BC859CLT1
MMBD2835LT1
MMBD2836LT1
MMBD2838LT1
MMBD6100LT1
MMBD6100LT3