



UPDATE NOTIFICATION
Generic Copy

30-APR-2002

SUBJECT: ON Semiconductor Update Notification #12428

TITLE: Addendum for PCN#11148 (SOT23 Capacity Expansion to PSI)

EFFECTIVE DATE: 11-Jun-2002

AFFECTED CHANGE CATEGORY: Subcontractor Assembly / Test Site

AFFECTED PRODUCT DIVISION: Bipolar Discretes Products Div

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Laura Rivers <S20636@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office
or Kenny Lung <R13903@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Jake Lee <R14795@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 addendum affects 4 General purpose transistors (MMBT2222ALT1/T3, MMBT3904LT1/T3).

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.

**Update Notification #12428****RELIABILITY DATA SUMMARY:****Reliability Test Vehicles: MMBT3904LT1, BAS19LT1**

Test Desc.	Test Condition	Interval	Rej/Sample size
Autoclave	Ta=121DegC, P=15psig, RH=100%	96 hours	0/231
Temp cycle	Ta= -65/150DegC, air to air Dwell >10 mins	1000 cycles	0/231
High Temp Storage	Ta=150DegC	1008 hours	0/231
Solder Heat	Ta=260DegC	1X	0/135
Solderability	Steam age=8 hours Ta=245DegC	1X	0/30
High Temp Reverse Bias	Ta=150DegC, V=rated	1008 hours	0/231
IOL	Ton=Toff, Ta=25DegC, Delta Tj=100DegC or rated Pd	1008 hours	0/231
H3TRB	Ta=85DegC, RH=85%, V=80% of rated voltage or 100V lowest.	1008 hours	0/231

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.

AFFECTED DEVICE LIST :**PART**

MMBT2222ALT1
MMBT2222ALT3
MMBT3904LT1
MMBT3904LT3