



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION

Generic Copy

08-Dec-2009

SUBJECT: ON Semiconductor Final Product/Process Change Notification #16371

TITLE: Qualification of Nantong-Fujitsu Microelectronics for Assembly/Test of TO-247 Bipolar Power Transistors and Schottky Rectifiers.

PROPOSED FIRST SHIP DATE: 08-Mar-2010

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly & Test Site

AFFECTED PRODUCT DIVISION(S): Standard Components Group

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or
Jose Ramirez at jose.ramirez@onsemi.com (Bipolar Transistors)
Mike Schager at mike.schager@onsemi.com (Schottky Rectifiers)

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Laura Rivers <laura.rivers@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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

This FPCN announces the planned capacity expansion of ON Semiconductor's assembly and test operations of TO-247 Discrete packaged products, currently built at the PSI Manila facility, to Nantong-Fujitsu's China facility. Upon the expiration of this FPCN, these Bipolar Power Transistors and Schottky Rectifier devices may be processed at either location. The Nantong-Fujitsu facility is currently used to manufacture ON's TO-220AB, TO-220AC, I2PAK, & DPAK devices, and is ISO/TS 16949:2002 certified.



Final Product/Process Change Notification #16371

RELIABILITY DATA SUMMARY:

Reliability Test Results:

Package: TO-247

Qualification Vehicles:

MJW21195G

MJW21196G

MBR40H100WTG

MBR7030WTG

MJW21195G

| Test: | Conditions: | Interval: | Results |
|--------------|-------------------------------------------------|-----------|---------|
| Autoclave+PC | Ta=121C RH=100% ~15 psig | 96 hrs | 0/77 |
| H3TRB+PC | Ta=85C RH=85% bias=80% rated V or100V Max | 1008 hrs | 0/77 |
| IOL+PC | Ta=25C, Delta TJ = 100 C, Ton/off = 3.5 min. | 8572 cyc | 0/77 |
| TC+PC | Ta= -65 C to 150 C | 1000 cyc | 0/77 |
| RSH | Ta=260C, 10 sec dwell | | 0/30 |

MJW21196G

| Test: | Conditions: | Interval: | Results |
|--------------|-------------------------------------------------|-----------|---------|
| Autoclave+PC | Ta=121C RH=100% ~15 psig | 96 hrs | 0/77 |
| H3TRB+PC | Ta=85C RH=85% bias=80% rated V or100V Max | 1008 hrs | 0/77 |
| IOL+PC | Ta=25C, Delta TJ = 100 C, Ton/off = 3.5 min. | 8572 cyc | 0/77 |
| TC+PC | Ta= -65 C to 150 C | 1000 cyc | 0/77 |
| RSH | Ta=260C, 10 sec dwell | | 0/30 |

MBR40H100WTG

| Test: | Conditions: | Interval: | Results |
|--------------|----------------------------------------------|-----------|---------|
| Autoclave+PC | Ta=121C RH=100% ~15 psig | 96 hrs | 0/144 |
| H3TRB+PC | Ta=85C RH=85% bias=80% rated V or100V Max | 1008 hrs | 0/144 |

MBR7030WTG

| Test: | Conditions: | Interval: | Results |
|--------------|--------------------------|-----------|---------|
| Autoclave+PC | Ta=121C RH=100% ~15 psig | 96 hrs | 0/144 |
| TC+PC | Ta= -65 C to 150 C | 1000 cyc | 0/144 |
| RSH | Ta=260C, 10 sec dwell | | 0/60 |

ELECTRICAL CHARACTERISTIC SUMMARY:

There are no changes in electrical characteristics; and product performance meets data sheet specifications. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Product from Nantong-Fujitsu will be identified by NF site code marking.



Final Product/Process Change Notification #16371

AFFECTED DEVICE LIST

**BIPOLAR POWER TRANSISTOR
PARTS**

MJW1302AG
MJW18020G
MJW21191G
MJW21192G
MJW21193G
MJW21194G
MJW21195G
MJW21196G
MJW3281AG

SCHOTTKY RECTIFIER PARTS

MBR3045WTG
MBR4015LWTG
MBR4045WTG
MBR40H100WTG
MBR6045WTG
MBR60L45WTG
MBR7030WTG