



FINAL PRODUCT/PROCESS CHANGE NOTIFICATIONGeneric Copy

10-Oct-2006**SUBJECT: ON Semiconductor Final Product/Process Change Notification #15643****TITLE: DPAK Package Added Capacity at Nantong Fujitsu****PROPOSED FIRST SHIP DATE: 10-Dec-2006****AFFECTED CHANGE CATEGORY(S): Subcontractor Assembly Site****AFFECTED PRODUCT DIVISION(S): Power MOSFET Division****FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local ON Semiconductor Sales Office or Clara Cheng, Phone Number: 602-244-3319
<Clara.Cheng@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Kathleen Van Tyne, Phone
Number: 602-244-4088 <k.vantyne@onsemi.com>

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Donna Scheuch, Phone Number: 602-244-4328
<d.scheuch@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. Normally, FPCNs are issued at least 60 days prior to implementation of the change. Because of a shortage of the EG die, the implementation date is shorter.

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 Process Change Notice is an extension to Process Change Notice #13266 available at www.onsemi.com

PCN #13266 announced that ON Semiconductor would be using Nantong Fujitsu Microelectronics Co. (NFME) as a manufacturing facility for their Low Voltage, N-Channel, High Cell Density MOSFET products. The Product portfolio being assembled at NFME will also include the Devices listed in this notification.

NFME's DPAK package does meet JEDEC case outline standards, however, some minor backside visual differences compared with other manufacturing facilities used by ON Semiconductor exist. In addition to NFME, ON Semiconductor will continue to manufacture DPAK products in their internal factory in Seremban, Malaysia, and external subcontractor ChipPac in Kuala Lumpur, Malaysia. Samples are available upon request.

**Final Product/Process Change Notification #15643****RELIABILITY DATA SUMMARY:**

Reliability Test Results:

Test: High Humidity, High Temperature Reverse Bias (H3TRB)

Conditions: Vds=19.2V, Ta=85°C, RH=85%, 1008-Hrs

Results: 0/231

Test: High Temperature Gate Bias (HTGB)

Conditions: Vgs=20V, Ta=150°C, 1008-Hrs.

Results: 0/231

Test: High Temperature Reverse Bias (HTRB)

Conditions: Vds=19.2V, Ta=150°C, 1008-Hrs

Results: 0/231

Test: Intermittent Operating Life (IOL)

Conditions: Ta=25°C, delta Tj=100°C, 2-min on/off, 15K-cycles

Results: 0/231

Test: Temperature Cycling (TC-PC)

Conditions: Ta=-65°C/150°C, Air-to-Air, Dwell >=10-min, 1000-cy

Results: 0/231

Test: Autoclave Test (AC-PC)

Conditions: Ta=121°C, P=15psi, RH=100%, 96-Hrs

Results: 0/231

Test: Solder Heat

Conditions: Ta=260°C, Dwell Time=10-Seconds,

Results: 0/90

Test: Solderability

Conditions: Steam age=8-Hrs, Ta=245°C

Results: 0/45

Conditions: Steam age=8-Hrs, Ta=260°C

Results: 0/45

Test: Precondition*(MSL-1).

Conditions: IR=235°C

Results: 0/975

Test: Resistance to Solder Heat

Conditions: Ta= 260°C, Dwell Time= 10 Sec

Results: 0/30

Test: Solderability (PbSn)

Conditions: Ta= 245°C,

Results: 0/15

Tests: Solderability (SnCuAg)

Conditions: Ta= 260°C,

Results: 0/15

**Final Product/Process Change Notification #15643****ELECTRICAL CHARACTERISTIC SUMMARY:**

There is no change in electrical parametric performance. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Product manufactured for ON Semiconductor at NFME will be marked with 'Nf' preceding the date code. Product may ship from NFME at the expiration of this PCN. Date Code 0648.

AFFECTED DEVICE LIST

NTD4806N-35G
NTD4808N-35G
NTD4809N-35G
NTD4810N-35G
NTD4813N-35G
NTD4804N-35G
NTD4804NA-35G
NTD4806NA-35G
NTD4809NA-35G