

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16604

Generic Copy

Issue Date: 17-Mar-2011

<u>TITLE</u>: Final Notification for Transfer of the Thyristor Surge Protection Devices (TSPD) from ON Semiconductor ZR Fab in Phoenix (USA) to ON Semiconductor ISMF Fab in Seremban (Malaysia).

PROPOSED FIRST SHIP DATE: 17-Jun-2011

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Fab Site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or following contact Product Engineers by affected Technology: **Thyristor (TSPD)** - Suei Huey Wong<sueihuey.wong@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office.

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Laura Riverslaura.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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor is notifying customers of its plan to transfer Bidirectional TVS Diodes and Bidirectional ESD Diodes products from ON Semiconductor ZR Fab in Phoenix (USA) to ON Semiconductor ISMF Fab in Seremban (Malaysia).

The ISMF facility is an ON Semiconductor owned wafer fab that has been producing products for ON Semiconductor since 1998. Several existing technologies within ON Semiconductor's product families are currently sourced from ISMF, including Zener Diodes, Small Signal Diodes, Small Signal Bipolar Transistor, and USB array filter products. ON Semiconductor Seremban Wafer FAB is an internal factory that is TS16949, ISO-9001 and ISO-14000 certified.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards.

Products listed in this Final PCN should be transferred to ON Semiconductor ISMF Fab in Seremban (Malaysia) starting 14st June 2011. After 14st June 2011, customer may receive products from either facility.

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QUALIFICATION PLAN:

Reliability testing was performed on qualification vehicles chosen based on die size, voltage rating, and run rates.

RELIABILITY DATA SUMMARY

THYRISTOR SURGE PROTECTION DEVICE (TSPD):

Package: TSOP-5 Qual Vehicle:

NP0120TAT1G

Test: Conditions: Interval: Results **HTRB** Ta=100C,80% Rated Voltage 504 hrs 0/240 Autoclave+PC Ta=121C RH=100% ~15 psig 96 hrs 0/240 H3TRB+PC Ta=85C RH=85% 504 hrs 0/240

bias=80% rated V or100V Max

TC+PC Ta= -65 C to 150 C 1000 cyc 0/240

RSH Ta=260C, 10 sec dwell 0/30

ELECTRICAL CHARACTERISTIC SUMMARY:

Available upon request

CHANGED PART IDENTIFICATION:

Affected products from ON Semiconductor with date code 1124 representing WW24, 2011 and greater may be sourced from either the ISMF Fab in Seremban (Malaysia) or the ZR Fab in Phoenix (USA).

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List of affected General Parts:

Thyristor Surge Protection Device (TSPD):

Parts:

NP0080TAT1G NP0120TAT1G

Note: Data Sheet is being revised to reflect historical production distributions. There is no actual change in the products.

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