

ON Semiconductor
Formerly a Division of Motorola



Subject: Motorola PRODUCT AND PROCESS CHANGE NOTIFICATION 4606

TITLE: ADDITIONAL ASSEMBLY/TEST SITE FOR SMB SCHOTTKY RECTIFIERS

EFFECTIVE DATE: 01-AUG-99

AFFECTED CHANGE CATEGORIES

Motorola Assembly Site
Subcontractor Test Site

Motorola Test Site
Subcontractor Assembly Site

AFFECTED PRODUCT DIVISIONS

POWER PRODUCTS DIV

ADDITIONAL RELIABILITY DATA: Available
Contact your local Motorola Sales Office.

Ref: R12559

SAMPLES: Contact Below
Contact your local Motorola Sales Office.

Ref: RP0304@email.sps.mot.com

For any questions concerning this notification:

REFERENCE:ROBERT COOK

PHONE: 602-244-3599

DISCLAIMER:

MOTOROLA 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 MOTOROLA SALES
OFFICE.

GPCN FORMAT: CUSTOMER

DO NOT REPLY TO THIS MESSAGE.

PRODUCT AND PROCESS CHANGE NOTIFICATION

ISSUE DATE: 23-Apr-1999

NOTIFICATION #:4606

EFFECTIVE DATE: 01-Aug-1999

ISSUING DIVISION:PHX-PPD

DESCRIPTION AND PURPOSE

Starting on the effective date, SMB Schottky rectifiers will be assembled and tested in either of two sites. This product will be marked and labeled as the same part number. The SMB Schottky rectifier product is presently assembled and tested in Seremban, and a qualified sub-contractor in Taiwan is being added.

Purpose of Change:

In order to respond to the increasing demand for these products, arrangements have been made to supplement present capacity with sub-contract assembly and test.

QUALIFICATION PLAN

Same as Rel Data

RELIABILITY DATA SUMMARY

MOTOROLA RELIABILITY REPORT COMMUNICATIONS, POWER, SIGNAL TECHNOLOGIES GROUP
POWER PRODUCTS DIVISION

TITLE: RELIABILITY REPORT (SUMMARY) TMOS - MBRS2040LT3 SCHOTTKY
RECTIFIER QUALIFICATION
LINE: RLL708L, PACKAGE: SMB, CASE 403A-03,
ASSY SITE: LITEON, DIE: 62 X 62 mil

INTRODUCTION

Reliability testing for the MBRS2040LT3 manufactured at LITEON with TiNiAg is complete through 1,000 hours of testing. (ABSJ7214 , 7215 and 7216)

Seremban is also qualified to assemble the MBRS2040LT3, see the attached "Rational for Generic Data". Seremban has been qualified to manufacture the SMB package for several years. The die that SBN will use is the same one that was used for the LITEON qualification.

The qualification was performed using standard test methods. The devices tested represent three separate manufacturing lots. The following test were performed: LOT #7214 LOT #7215 LOT#7216

A. High Temperature Reverse Bias (HTRB)

VR= 40V, TA=150DegC, 1000 hours 0/80 0/80 0/80

C. High Temperature High Humidity with Bias (H3TRB)

VR= 40V, TA= 85DegC, RH=85%, 1000 hours 0/80 0/80 0/80

D. Intermittent Operating Life (IOL)

Delta tj= 100DegC, One cycle = 6 min.,
10,000 cyc. 0/80 0/80 0/80

E. Temperature cycle (TC)

15 Min dwell, -65 to 150DegC,
1000 cycles 0/80 0/80 0/80

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F. Autoclave (PC)

TA= 121DegC, PSIG= 14.7,

96 hours

0/80

0/80

0/80

H. Tri-Temperature Electrical Measurement (TT)

Ambient Temperatures = -40DegC, 25DegC and

100DegC

0/25

0/25

0/25

ELECTRICAL CHARACTERISTIC SUMMARY

There is no change in the die, thus there is no change in electrical performance.

CHANGED PART IDENTIFICATION

For devices assembled and tested at sub-contractor an assembly test site code (ZP) is added on the device marking.

FILE FORMAT: ASCII TEXT

FONT - Courier

SIZE - 12 Point

LINE - 70 characters/line

PAGE - 55 lines/page

PAGEBREAK CHARACTER - ^L (Control L)

AFFECTED DEVICE LIST (WITHOUT SPECIALS)

MBRS1540T3 , MBRS2040LT3 , MBRS240LT3