ON Semiconductor
Formerly a Division of Motorola

Subject: Motorola PRODUCT AND PROCESS CHANGE NOTIFICATION 4934

TITLE: MJD50 AND MJD47 TECHNOLOGY CHANGE

EFFECTIVE DATE: 29-OCT-99

AFFECTED CHANGE CATEGORIES
  Motorola Fab Site   Wafer Process
  Design Change

AFFECTED PRODUCT DIVISIONS
  POWER PRODUCTS DIV

ADDITIONAL RELIABILITY DATA: Available   Ref: TT0015
Contact your local Motorola Sales Office.

SAMPLES: Contact Below   Ref: TT0015@email.sps.mot.com
Contact your local Motorola Sales Office.

For any questions concerning this notification:
REFERENCE: DANIEL ZURAWSKI   PHONE: 33 5 61 19 9402

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.

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PRODUCT AND PROCESS CHANGE NOTIFICATION

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ISSUE DATE: 21-Jul-1999 NOTIFICATION #:4934
EFFECTIVE DATE: 29-Oct-1999 ISSUING DIVISION:PHX-PPD

DESCRIPTION AND PURPOSE

The current Die source for devices MJD47 & MJD50 use an Epi Collector glassivated moat technology and is built at Phx-MOS4 Fab. The new Die source will use the Planar-SIPOS Technology and will be built at Toulouse, France Wafer Fab BP6. The purpose of this change is to improve the Product quality through technology rationalization to the Planar Sipos which is the current technology used on Bipolar high voltage devices such as TIP50, MJE13003, MJE13005, MJE13007, BUL45, BUL146, etc.

QUALIFICATION PLAN

Electrical Characterization and Reliability reports available upon request.

RELIABILITY DATA SUMMARY

The MJD50 / MJD47 series is derived from the qualified device family mentioned before, with same design rules and same die geometry. To qualify the MJD50/MJD47, additional reliability test were performed on one lot:

HTRB: 1000 hours, 77 pieces, 0 rejects
H3TRB: 1000 hours, 77 pieces, 0 rejects
Temperature Cycling: 1000 cycles, 77 pieces, 0 rejects
Autoclave: 96 hours, 231 pieces, 0 rejects

Reliability Report available upon request.

ELECTRICAL CHARACTERISTIC SUMMARY

Electrical Characterization performed on 3 qualification lots, excellent parametric with 6 sigma distribution with same or better performance. Characterization Report available upon request.

CHANGED PART IDENTIFICATION

All product with date codes "9941" and beyond can be processed with the Planar Sipos technology.

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)

MJD47 , MJD47T4 , MJD50 , MJD50-001
MJD50T4