

ON Semiconductor



Subject: ON Semiconductor PRODUCT/PROCESS CHANGE NOTIFICATION 10123

TITLE: SOT223 EPOXY DIE ATTACH

EFFECTIVE DATE: 26-MAR-00

AFFECTED CHANGE CATEGORIES

Assembly Process

Wafer Process

AFFECTED PRODUCT DIVISIONS

BIPOLAR DISCRETES DIV

ADDITIONAL RELIABILITY DATA: Available

Ref: R38181

Contact your local ON Semiconductor Sales Office.

SAMPLES: Contact Below

Ref: R14795@email.sps.mot.com

Contact your local ON Semiconductor Sales Office.

For any questions concerning this notification:

REFERENCE: JAKE LEE

PHONE: 602-244-3453

DISCLAIMER:

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.

GPCN FORMAT: CUSTOMER

DO NOT REPLY TO THIS MESSAGE.

PRODUCT/PROCESS CHANGE NOTIFICATION

ISSUE DATE: 26-Jan-2000

NOTIFICATION #:10123

EFFECTIVE DATE: 26-Mar-2000

ISSUING DIVISION:PHX-PPD

DESCRIPTION AND PURPOSE

Small Signal SOT223 product with die sizes of 32x32 mils and larger will convert from a Eutectic Die Attach process to an Epoxy Die Attach process enhancing product quality during board mount assembly. As a part of the design improvement, the SOT223 leadframe is being modified to add additional mold lock features, and the wafer back metal process is converted from a Sinter process to an Alloy process.

QUALIFICATION PLAN

See Rel Data

RELIABILITY DATA SUMMARY

PZT751T1, tracking #SOQ994301, interim reliability results below, 1000 hr data available by January 28, 2000.

Autoclave 96 hrs 231/0
Temp Cycle 500 cycles 231/0
Solder Heat 1x 135/0
H3TRB 48 hrs 231/0
IOL 500 hrs 231/0

Device PZT651T1 tracking #SOQ994401, 1000 hr data available by February 4, 2000.

ELECTRICAL CHARACTERISTIC SUMMARY

Electrical DC distribution of 3 qual lots vs 1 control lot with focus VCEs, VBES, and HFE linearity evaluated. Electrical distributions and standard deviations were identical between qual group and control.

CHANGED PART IDENTIFICATION

Parts marked with Date Code R04 (Apr 2000) and later will have the Epoxy die attach process.

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)

BCP68T1 , BSP52T1 , PZT651T1 , PZT751T1
PZTA96ST1 , PZTA96ST3