



PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

08-OCT-2001

SUBJECT: ON Semiconductor Product/Process Change Notification #11837

TITLE: Initial Notification - New Foundry/Assembly Site Transfer for Bi-Directional TVS Zeners in SMA/SMB Packages.

EFFECTIVE DATE: 05-Feb-2002

AFFECTED CHANGE CATEGORY: Subcontractor Assembly/Fab Site

AFFECTED PRODUCT DIVISION: Bipolar Discretes Products Div

ADDITIONAL RELIABILITY DATA: None

SAMPLES: No

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Paul Lem <FFBFBM@onsemi.com>

DISCLAIMER:

Initial Product/Process Change Notification (IPCEN) -First Notification distributed to customers.
Distributed at least 120 days from the effective date of the change.

Final Product/Process Change Notification (FPCEN) -Final Notification completing the notification process. Distributed at least 60 days from the effective date 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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

ON Semiconductor is currently qualifying a Taiwanese foundry for bi-directional TVS Zeners in SMA and SMB packages. This qualification will include our current internal and external assembly sites. This change will also include an external assembly site transfer from Taiwan to China. This Taiwanese foundry has been qualified for bi-directional TVS Zeners in Surmetic Axial Packages: refer to previous PCN#11499. ON semiconductor is continually pursuing methods to provide our customer high quality devices. This change will increase productivity and customer response without sacrificing quality in our services or products.

QUALIFICATION PLAN:

Qualification Vehicles:

SMA Package:

SZ2841T3-low voltage.

1SMA60CAT3 - mid/high voltage.

SMB Package:

1SMB15CAT3 - low voltage.

1SMB75CAT3 - high voltage.

**Product/Process Change Notification #11837****Qualification Plan:**

- External Visual
- Parametric Verification: Characterization, ESD, and Surge Testing.
- HTRB: T=150C, t=500/1000 hours.
- H3TRB: T=85C, RH=85%, t=500/1000 hours.
- Temp.Cycle: T=-65C(15min), T=150C(15min), t=500/1000 cycles.
- Autoclave: T=121C, P=15psig, t=96 hours.
- IOL: TON=2min/TOFF=2min, t=7500/15000 Cycles.
- DPA, Physical Dimensions, Assembly Die Shear or Equivalent
- Resistance to Solder Heat.
- Solderability.
- Thermal Resistance.

Qualification sample size in compliance with AEC-Q101 requirements.

RELIABILITY DATA SUMMARY:

Expected to be available after FPCN issued.

ELECTRICAL CHARACTERISTIC SUMMARY:

Expected to be available after FPCN issued.

CHANGED PART IDENTIFICATION:

Customers may receive effected SMA/SMB product per change, starting WW06, 2002.

China assembled product will include "PK" marking.

AFFECTED DEVICE LIST (WITHOUT SPECIALS):**PART**

1SMA10CAT3, 1SMA11CAT3, 1SMA12CAT3, 1SMA13CAT3, 1SMA14CAT3, 1SMA15CAT3,
1SMA16CAT3, 1SMA17CAT3, 1SMA18CAT3, 1SMA20CAT3, 1SMA22CAT3, 1SMA24CAT3,
1SMA26CAT3, 1SMA28CAT3, 1SMA30CAT3, 1SMA33CAT3, 1SMA36CAT3, 1SMA40CAT3,
1SMA43CAT3, 1SMA45CAT3, 1SMA48CAT3, 1SMA51CAT3, 1SMA54CAT3, 1SMA58CAT3,
1SMA60CAT3, 1SMA64CAT3, 1SMA70CAT3, 1SMA75CAT3, 1SMA78CAT3, 1SMB10CAT3,
1SMB11CAT3, 1SMB12CAT3, 1SMB13CAT3, 1SMB14CAT3, 1SMB15CAT3, 1SMB16CAT3,
1SMB17CAT3, 1SMB18CAT3, 1SMB20CAT3, 1SMB22CAT3, 1SMB24CAT3, 1SMB26CAT3,
1SMB28CAT3, 1SMB30CAT3, 1SMB33CAT3, 1SMB36CAT3, 1SMB40CAT3, 1SMB43CAT3,
1SMB45CAT3, 1SMB48CAT3, 1SMB51CAT3, 1SMB54CAT3, 1SMB58CAT3, 1SMB60CAT3,
1SMB64CAT3, 1SMB75CAT3, P6SMB11CAT3, P6SMB12CAT3, P6SMB13CAT3,
P6SMB15CAT3, P6SMB16CAT3, P6SMB18CAT3, P6SMB20CAT3, P6SMB22CAT3,
P6SMB24CAT3, P6SMB27CAT3, P6SMB30CAT3, P6SMB33CAT3, P6SMB36CAT3,
P6SMB39CAT3, P6SMB43CAT3, P6SMB47CAT3, P6SMB51CAT3, P6SMB56CAT3,
P6SMB62CAT3, P6SMB68CAT3, P6SMB75CAT3, P6SMB82CAT3, P6SMB91CAT3