



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

30-NOV-2001

SUBJECT: ON Semiconductor Final Product/Process Change Notification #12086

TITLE: Final Notification - Assembly/Test Site Change For SC75 Package

EFFECTIVE DATE: 02-Feb-2002

AFFECTED CHANGE CATEGORY:

On Semiconductor Assembly Site

On Semiconductor Test Site

AFFECTED PRODUCT DIVISION: Bipolar Discretes Products Div

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Laura Rivers <S20636@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Ts Teo <R10920@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Jake Lee <R14795@onsemi.com>

DISCLAIMER:

Final Product/Process Change Notification (FPCN) -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:

This is the Final Notification to IPCN#11626 that was released on 08/08/01 regarding assembly and test qualification of SC75 manufacturing to SBN1, ON Semiconductor's factory in Malaysia. This change affects general purpose transistors, Bias Resistor Transistors/Digital transistors, switching diodes and Zener diodes. SBN1 has been both QS9000 certified and Automotive Engineering Council(AEC)qualified. SBN1 has been producing all the technologies listed above in various packages as ON Semiconductor's main facility, serving the customers worldwide for decades. There will be no change to the form, fit, and function of the devices. Device parameters will continue to meet all Data Book specifications, and reliability will continue to meet or exceed ON Semiconductor standards.



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QUALIFICATION PLAN:

Qual vehicle DAN222

Test	Conditions	Sample size
Temp Cycle	Air to Air, Ta=-65 to +150 degC, dwell greater than or equal to 10 mins, 1000 cycles	231
Autoclave	Ta=121 degC, RH= 100%, PSIg=15, 192 hrs.	231
H3TRB	V=80% of rated or 100V depending on whichever lower, Ta=85 C, RH= 85%, 1000 hrs.	231
IOL	Ta=25 C, delta Tj =>100 C, 2.0 minutes on/off, 15000 cycles	231

RELIABILITY DATA SUMMARY:

Interim Reliability testing(500 hrs) of SC75 technology assembled and tested at SBN1 meets or exceeds the requirements set forth in the ON Semiconductor Product Introduction and Process Change Qualification 12MSB17722C(d). A copy of the full 1000 hour Reliability Report(ref # :JQ014301A, JQ014302) will be available by ww52.

Test vehicle: DAN222

Test	Condition	Interval	SS	Rejects
Autoclave	Ta=121 deg C, P=15psig RH=100%	96 hrs	231	0
Temp Cycle	Ta=-65/150 deg C air to air, dwell>10 mins	500 cycles 1000 cycles	231 231	0 0
Solder Heat	Ta=260 deg C	1X	135	0
Solderability,	Steam age=8hrs, Ta=245 deg C	1X	30	0
HAST	Ta=130 deg C, RH=85%	96 hrs	231	0
HTRB	Ta=150 degC	500 hrs	231	0
IOL	Ton=2min, Toff=2min Ta=25 degC	500 hrs	231	0

ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical characterization indicates parametric distribution remains unchanged with respect to electrical limit.

CHANGED PART IDENTIFICATION:

For site identification purpose, the date code character will be placed upright next to the device marking. Customers may receive these products manufactured starting with date code E (Jan 2002) or later.

RELATED PCN: #11626 Initial & Final Notification –
Assembly/Test Site Change For SC75 Package

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART

- 2SA1774
- 2SC4617
- BAS16TT1
- BAV70TT1
- BAW56TT1



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BC847BTT1
BC847CTT1
BC857BTT1
BC857CTT1
DA121TT1
DAN222
DAP222
DTA114EET1
DTA114TET1
DTA114YE
DTA114YET1
DTA115EET1
DTA123EET1
DTA123JET1
DTA124EET1
DTA124XET1
DTA143EE
DTA143EET1
DTA143TET1
DTA143ZET1
DTA144EET1
DTA144WET1
DTC114EET1
DTC114TE
DTC114TET1
DTC114YE
DTC114YET1
DTC115EET1
DTC123EET1
DTC123JET1
DTC124EET1
DTC124XET1
DTC143EET1
DTC143TET1
DTC143ZET1
DTC144EET1
DTC144WET1
MMBT2222ATT1
MMBT3904TT1
MMBT3906TT1
NSL05TT1
NSL12TT1
NSL35TT1
NZF220TT1