



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
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18-DEC-2002

SUBJECT: ON Semiconductor Final Product/Process Change Notification #12646

TITLE: Final Notification for Primarion to Phenitec Wafer Fab Transfer

EFFECTIVE DATE: 16-Feb-2003

AFFECTED CHANGE CATEGORY: Subcontractor Fab 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 Barbara Matteson <RM2230@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Fred Marchesi <RGM520@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 first of three FPCNs that will be issued to complete the changes stated in IPCN #12106 - Initial Notification for Primarion to Phenitec Wafer Fab Transfer.

This notification applies only to the N Channel JFET Family. The specific device list is included below.

In order to continue to fully support our customer's requirements for N-Channel JFET, the fabrication of these devices is being moved from ON Semiconductor's current subcontractor wafer fab, Primarion in Phoenix to a new subcontractor wafer fab, Phenitec in Japan. Phenitec has been a qualified wafer fab for ON Semiconductor and has been supplying TMOS, Logic and Analog devices to ON Semiconductor and has been manufacturing various packages for several years.


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RELIABILITY DATA SUMMARY:
***Qual vehicle list**

Qual Vehicle	Technology	Reason Chosen
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MMBFJ310LT1	N-ch JFET	Large die(18X17 mils), medium voltage(25V), Most complex, historical data,

Qual Plan:

TEST	CONDITIONS	INTERVAL	SIZE	FAILURES
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Autoclave	Ta=121DegC , RH=100%, P=15 psig,	0	336	0/336
		96	336	0/336
Temperature Cycle	Ta=65/+150DegC, Air to Air, Dwell equal to or greater than 15 Min., Transfer equal to or less than 10 Min.	0	336	0/336
		500	336	0/336
		1000	336	0/336
IOL	Ton=2 min, Toff=2min, Ta=25 DegC	7500 cycles	336	0/336
		15000 cycles	336	0/336
External Visual	Equal to or greater than Mid-Std-750, Method 2071	N/M	100%	
D.P.A	Random sample of good Temp Cycle and H3TRB devices per CDF-AEC-Q101-004 Section	N/M	6	Passed
Die Bond (Die Shear)	In-process assembly	N/M	45	Passed
Wire Bond (Pull)	In-process assembly	N/M	45	Passed
Bond Strength, Ball Shear	In-process assembly	N/M	45	Passed
High Humidity High Temp. Reverse Bias	Ta=+85DegC, RH=85%	0	336	0/336
		504	336	0/336
		1008	336	0/336
High Temp. Reverse Bias	Ta=+150DegC	0	336	0/336
		504	336	0/336
		1008	336	0/336
Electro Static Discharge	Human Body Model & Machine Models 1 & 2	N/M	42	Class 1C Class A

ELECTRICAL CHARACTERISTIC SUMMARY: Data Available Upon Request.

CHANGED PART IDENTIFICATION: Not Applicable

**Final Product/Process Change Notification #12646****AFFECTED DEVICE LIST (WITHOUT SPECIALS):****PART**

2N3819
2N5457
2N5458
2N5485
2N5486
2N5486RLRP
2N5555
2N5638RLRA
2N5639
2N5639RLRA
BF245A
BF245B
BF256A
BFR30LT1
BFR31LT1
BSR58LT1
J110
J110RLRA
J111RL1
J111RLRA
J111RLRP
J112
J112RL1
J112RLRA
J309
J310
J310RLRP
J310ZL1
MMBF4391LT1
MMBF4392LT1
MMBF4393LT1
MMBF4416LT1
MMBF5457LT1
MMBF5484LT1
MMBFJ309LT1
MMBFJ310LT1
MMBFJ310LT3
MMBFU310LT1
MPF102
MPF4392
MPF4393
MPF4393RLRP