



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16477

Generic Copy

Issue Date: 02-Jun-2010

TITLE: Final Notification for Transfer of the Low Voltage Bipolar Planar and EMI Filters from ON Semiconductor ZR Fab in Phoenix (USA) to ON Semiconductor ISMF Fab in Seremban (Malaysia)

PROPOSED FIRST SHIP DATE: 02-Sep-2010

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Fab Site

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or the following Contact Product Engineers:

FPCN Contact person by Affected Technology:

Low Voltage Bipolar Planar	Farrah Awang Omar	< farrah.omar@onsemi.com >
EMI Filters	Yew Hee Soon	< y.soon@onsemi.com >

SAMPLES: Contact your local ON Semiconductor Sales Office.

ADDITIONAL RELIABILITY DATA: Available

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

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation 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 <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor is notifying customers of its plan to transfer Low Voltage Bipolar Planar and EMI Filters products from ON Semiconductor ZR Fab in Phoenix (USA) to ON Semiconductor ISMF Fab in Seremban (Malaysia).

The ISMF facility is an ON Semiconductor owned wafer fab that has been producing products for ON Semiconductor since 1998. Several existing technologies within ON Semiconductor's product families are currently sourced from ISMF, including Zener Diodes, Small Signal Diodes, Small Signal Bipolar Transistor, and USB array filter products. ON Semiconductor Seremban Wafer FAB is an internal factory that is TS16949, ISO-9001 and ISO-14000 certified.

Qualification tests are designed to show that the reliability of transferred devices will continue to meet or exceed ON Semiconductor standards.



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Products listed in this final PCN should be transferred to ON Semiconductor ISMF Fab in Seremban (Malaysia) starting 16th Aug 2010. After 16th Aug 2010, customer may receive products from either facility.

QUALIFICATION PLAN:

Reliability testing was performed on qualification vehicles chosen based on die size, voltage rating, and run rates.

RELIABILITY DATA SUMMARY FOR LOW VOLTAGE BIPOLAR PLANAR:

Package: TO220, DPAK

Qual Vehicles:

MJE5852G, Package: TO220

Test:	Conditions:	Interval:	Results
HTRB	TA=150C,80% Rated Voltage	1008 hrs	0/80
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/80
H3TRB+PC	Ta=85C RH=85%	1008 hrs	0/80
	bias=80% rated V or100V Max		
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 3.5 min.	8572 cyc	0/80
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/80
RSH	Ta=260C, 10 sec dwell		0/30
DPA	post TC		0/2
DPA	post H3TRB		0/2

MJD340G, Package: Dpak

Test:	Conditions:	Interval:	Results
HTRB	TA=150C,80% Rated Voltage	1008 hrs	0/160
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/160
H3TRB+PC	Ta=85C RH=85%	1008 hrs	0/160
	bias=80% rated V or100V Max		
IOL+PC	Ta=25C, Delta TJ = 100 C, Ton/off = 2 min.	15000 cyc	0/160
TC+PC	Ta= -65 C to 150 C	1000 cyc	0/160
RSH	Ta=260C, 10 sec dwell		0/30
DPA	post TC		0/4
DPA	post H3TRB		0/4

RELIABILITY DATA SUMMARY FOR EMI FILTERS:

Package: 0201 Flip Chip PbFree

Qual Vehicles:

ESD11N5.0ST5G

Test:	Conditions:	Interval:	Results
Autoclave+PC	Ta=121C RH=100% ~15 psig	96 hrs	0/231
TC+PC	Ta= - 40 C to 125 C	1000 cyc	0/231
HTSL	Ta=150C	1008 hrs	0/231
DPA	post TC		0/6



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ELECTRICAL CHARACTERISTIC SUMMARY:

Available upon request

CHANGED PART IDENTIFICATION:

Affected products from ON Semiconductor with date code 1032 or F representing WW32, 2010 and greater may be sourced from either the ISMF Fab in Seremban (Malaysia) or the ZR Fab in Phoenix (USA).



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List of affected General Parts for Low Voltage Bipolar Planar:

2N5038
2N5038G
2N5655G
2N5657
2N5657G
2N6338G
2N6341G
BD135G
BD136G
BD137G
BD138G
BD139G
BD140G
BD159G
BD787G
BD788G
BU406G
BUV21
BUV21G
BUV22G
BUV26G
BUV27G
D44C12G
D44H11G
D44H8G
D44VH10G
D45C12G
D45H11G
D45H8G
D45VH10G
MJB44H11G
MJB44H11T4
MJB44H11T4G
MJB45H11G
MJB45H11T4
MJB45H11T4G
MJC5038WP
MJD200G
MJD200RL
MJD200RLG
MJD200T4
MJD200T4G
MJD200T5G
MJD210G
MJD210RLG
MJD210T4
MJD210T4G
MJD243G
MJD243T4
MJD243T4G
MJD253-1G
MJD253T4



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MJD253T4G
MJD340G
MJD340RL
MJD340RLG
MJD340T4
MJD340T4G
MJD350
MJD350G
MJD350T4
MJD350T4G
MJD350T4H
MJD44E3T4
MJD44E3T4G
MJD44H11
MJD44H11-1G
MJD44H11G
MJD44H11RL
MJD44H11RLG
MJD44H11T4
MJD44H11T4G
MJD44H11T5G
MJD45H11
MJD45H11-1G
MJD45H11G
MJD45H11RL
MJD45H11RLG
MJD45H11T4
MJD45H11T4G
MJD5731T4G
MJE15028G
MJE15029G
MJE15030G
MJE15031G
MJE15032G
MJE15033G
MJE15035G
MJE170G
MJE171G
MJE172G
MJE180
MJE180G
MJE181G
MJE182
MJE182G
MJE200
MJE200G
MJE210G
MJE210TG
MJE243
MJE243G
MJE253
MJE253G
MJE270G
MJE271G
MJE340



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MJE340G
MJE3439
MJE3439G
MJE344
MJE344G
MJE350
MJE350G
MJE5730G
MJE5731AG
MJE5731G
MJE5850G
MJE5851G
MJE5852G
MJEC15030WP
MJEC15031WP
MJEC15032TR
MJEC15033TR
MJEC340WP
MJEC350WP
MJF15030G
MJF15031G
MJF44H11G
MJF45H11G
MJL1302AG
MJL4281AG
MJL4302AG
MJW1302AG
MMJT350T1G
NJD2873
NJD2873T4
NJD2873T4G
NJL0281DG
NJL0302DG
NJL1302DG
NJL4281DG
NJL4302DG
NJW0281G
NJW0302G
NJW1302G

List of affected General Parts for EMI Filters:

NUF2450MUT2G
NUF4220MNT1G