

Generic Copy

Issue Date: 03-Mar-2011

<u>TITLE</u>: Qualification of Nantong Fujitsu Microelectronics Co.,Ltd. for Assembly/Test of DPAK (TO-252) Bipolar Power Transistors, Power Schottky and Ultrafast Rectifiers.

PROPOSED FIRST SHIP DATE: 03-Jun-2011

<u>AFFECTED CHANGE CATEGORY(S):</u> Small Signal Division (SSD) and Power Discrete Division (PDD) of the Standard Product Group

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or
Bipolar Power Transistors: Jose Ramirez < jose.l.ramirez@onsemi.com >
Power Schottky and Ultrafast Rectifiers: Don Knudsen < don.knudsen@onsemi.com >

<u>SAMPLES</u>: Contact your local ON Semiconductor Sales Office or Bipolar Power Transistors: Farrah Awang Omar < farrah.omar@onsemi.com> Power Schottky and Ultrafast Rectifiers: Norfizah Mohd Ariffin < norfizah.mohdariffin@onsemi.com

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or 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:

This FPCN announces the planned capacity expansion of ON Semiconductor's assembly and test operations of DPAK (TO-252) discrete packaged products, currently built at ON Semiconductor Seremban facility, to Nantong Fujitsu Microelectronics Co., Ltd. at China.

Upon the expiration of this FPCN, these Bipolar Power Transistors, Power Schottky and Ultrafast Rectifiers devices may be processed at either location. These products have been qualified to commodity/commercial requirements. Nantong Fujitsu is a current ON Semiconductor supplier of other power packages and is ISO9002, ISO14001 and TS16949 certified. These products will continue being Pb-free, Halide free and RoHS compliant.

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RELIABILITY DATA SUMMARY:

Package: DPAK TO-252

Qualification Vehicles:

MJD340T4G MJD350T4G MURD550PFT4G MBRD660CTT4G

Reliability Test Results:

MJD340T4G

Test:	Conditions:	Interval:	Results
HTRB	Ta=150°C,80% Rated Voltage	1008 hrs	0/240
Autoclave+PC	Ta=121°C RH=100% ~15 psig	96 hrs	0/240
H3TRB+PC	Ta=85°C RH=85%	1008 hrs	0/240
	bias=80% rated V or100V Max		
IOL+PC	Ta=25°C, Delta TJ = 100°C,	15000 cyc	0/240
	Ton/off = 2 min.		
TC+PC	Ta= -65°C to 150°C	500 cyc	0/240
RSH	Ta=260C, 10 sec dwell		0/90
Solderability	Ta=245C, 10sec dwell		0/45

MJD350T4G

Test:	Conditions:	Interval:	Results
HTRB	Ta=150°C,80% Rated Voltage	1008 hrs	0/80
Autoclave+PC	Ta=121°C RH=100% ~15 psig	96 hrs	0/80
H3TRB+PC	Ta=85°C RH=85%	1008 hrs	0/80
	bias=80% rated V or100V Max		
IOL+PC	Ta=25°C, Delta TJ = 100°C,	15000 cyc	0/80
	Ton/off = 2 min.		
TC+PC	Ta= -65°C to 150°C	500 cyc	0/80
RSH	Ta=260°C, 10 sec dwell		0/30
Solderability	Ta=245°C, 10 sec dwell		0/15

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MBRD660CTT4G

Test:	Conditions:	Interval:	Results
HTRB	Tj=150°C,80% Rated Voltage	1008 hrs	0/240
Autoclave+PC	Ta=121°C RH=100% ~15 psig	96 hrs	0/240
H3TRB+PC	Ta=85°C RH=85%	1008 hrs	0/240
	bias=80% rated V or100V Max		
IOL+PC	Ta=25°C, Delta TJ = 100°C,	15000 cyc	0/240
	Ton/off = 2 min.		
TC+PC	Ta= -65°C to 150°C	500 cyc	0/240
RSH	Ta=260°C, 10 sec dwell		0/90
Solderability	Ta=245°C, 10sec dwell		0/45

MURD550PFT4G

Test:	Conditions:	nterval: Results	
HTRB	Ta=150°C,80% Rated Voltage	1008 hrs 0/240)
Autoclave+PC	Ta=121°C RH=100% ~15 psig	96 hrs 0/240)
H3TRB+PC	Ta=85°C RH=85%	1008 hrs 0/240)
	bias=80% rated V or100V Max	(
IOL+PC	Ta=25°C, Delta TJ = 100°C,	15000 cyc 0/240)
	Ton/off = 2 min.		
TC+PC	Ta= -65°C to 150°C	500 cyc 0/240)
RSH	Ta=260°C, 10 sec dwell	0/90	
Solderability	Ta=245°C, 10sec dwell	0/45	

ELECTRICAL CHARACTERISTIC SUMMARY:

There are no changes in electrical characteristics and product performance meets data sheet specifications. Characterization data is available upon request.

CHANGED PART IDENTIFICATION:

Product from Nantong Fujitsu will be identified by NF site code marking.

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List of affected General Parts:

	PARTS	
BUD42DT4G	MJD148T4G	MJD32T4G
MJD47T4G	MBRD1045T4G	MBRD5H100T4G
MJD112T4G	MURD620CTT4G	MBRD620CTT4G
MJD50T4G	MJD200T4G	MJD340T4G
MSRD620CTT4G	MURHD560T4G	MBRD630CTT4G
MJD5731T4G	MURHD560W1T4G	MJD350T4G
MSRD620CTT4RG	MJD210T4G	MBRD640CTT4G
MJD117T4G	MBRD320T4G	MJD41CT4G
MJD6039T4G	MBRD320T4H	MBRD640CTT4H
MURD320T4G	MJD243T4G	MBRD650CTT4G
NJD2873T4G	MJD253T4G	MJD42CT4G
MURD330T4G	MBRD330T4G	MJD44E3T4G
MJD122T4G	MJD2955T4G	MBRD660CTT4G
MURD340T4G	MJD3055T4G	MJD44H11T4G
NJD35N04T4G	MBRD340T4G	MBRD660CTT4H
MURD530T4G	MJD31CT4G	MJD45H11T4G
MJD127T4G	MBRD350T4G	MBRD835LT4G
MURD550PFT4G	MJD31T4G	MBRD835LT4H
MJD128T4G	MJD32CT4G	
MBRD1035CTLT4G	MBRD360T4G	

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