

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #16520

Generic Copy

Issue Date: 16-Sep-2010

TITLE: Qualification of MingXin Microelectronics Ltd. for Assembly/Test of DPAK (TO-252) Bipolar Power Transistors and Ultrafast Rectifiers.

PROPOSED FIRST SHIP DATE: 16-Dec-2010

AFFECTED CHANGE CATEGORY(S):

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or

Bipolar Transistors: Jose Ramirez <jose.ramirez@onsemi.com>

Ultrafast Rectifiers: Norfizah Mohd Ariffin<norfizah.mohdariffin@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:

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 the ON Semiconductor Seremban, Malaysia facility, to MingXin Microelectronic's Ningbo, China facility.

Upon the expiration of this FPCN, these Bipolar Power Transistors and Ultrafast Rectifier devices may be processed at either location. These products have been qualified to commodity/commercial requirements. MingXin Microelectronics Ltd. Is a supplier of power packages to many large semiconductor companies and are 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 MURD550T4G

MJD340T	4G
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Test:	Conditions:	Interval:	Results
HTRB Autoclave+PC H3TRB+PC	Ta=150°C,80% Rated Voltage Ta=121C RH=100% ~15 psig Ta=85C RH=85% bias=80% rated V or100V Max	1008 hrs 96 hrs 1008 hrs	0/160 0/160 0/160
IOL+PC	Ta=25°C, Delta TJ = 100 °C, Ton/off = 2 min.	15000 cyc	0/154
DPA	post H3TRB		0/4
MJD350T4G HTRB TC+PC DPA	Ta=150°C,80% Rated Voltage Ta= -65 C to 150° C post TC	1008 hrs 500 cyc	0/80 0/80 0/2
MURD550T4G	T 45000 000/ D + 11/4	1000	0/4.00
HTRB	Ta=150°C,80% Rated Voltage	1008 hrs	0/160
Autoclave+PC H3TRB+PC	Ta=121°C RH=100% ~15 psig Ta=85°C RH=85%	96 hrs 1008 hrs	0/80 0/160
HISTROFFC	bias=80% rated V or100V Max	10001115	0/100
IOL+PC	Ta=25°C, Delta TJ = 100 °C, Ton/off = 2 min.	15000 cyc	0/160
DPA	post H3TRB		0/2

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 MingXin will be identified by NN site code marking.

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List of affected General Parts:

PART				
BUD42DT4G	MJD3055T4G	MJD47G		
MJD112G	MJD31C1G	MJD47T4G		
MJD112T4G	MJD31CG	MJD50G		
MJD117G	MJD31CT4G	MJD50T4G		
MJD117T4G	MJD31T4G	MJD5731T4G		
MJD122G	MJD32CG	MJD6039T4G		
MJD122T4G	MJD32CT4G	NJD2873T4G		
MJD127G	MJD32T4G	NJD35N04G		
MJD127T4G	MJD340G	NJD35N04T4G		
MJD128T4G	MJD340T4G	MSRD620CTG		
MJD148T4G	MJD350G	MSRD620CTT4G		
MJD200G	MJD350T4G	MURD320T4G		
MJD200T4G	MJD41CT4G	MURD330T4G		
MJD200T5G	MJD42C1G	MURD340T4G		
MJD210G	MJD42CG	MURD530T4G		
MJD210T4G	MJD42CT4G	MURD550PFT4G		
MJD243G	MJD44E3T4G	MURD620CTG		
MJD243T4G	MJD44H11G	MURD620CTH		
MJD253T4G	MJD44H11T4G	MURD620CTT4G		
MJD2955G	MJD44H11T5G	MURHD560T4G		
MJD2955T4G	MJD45H11G	MURHD560W1T4G		
MJD3055G	MJD45H11T4G			

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