ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

16-Jan-2007

SUBJECT: ON Semiconductor Final Product/Process Change Notification #15714

TITLE: Additional Site Qualification (Leshan, China) for SOD-923

PROPOSED FIRST SHIP DATE: 16-Apr-2007

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly and Test Site

AFFECTED PRODUCT DIVISION(S): Discrete Products Division

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Ed Reak< ed.reak@onsemi.com >

SAMPLES: Contact your local ON Semiconductor Sales Office or Wayne Meadows <wayne.meadows@onsemi.com>

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 60 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 your local ON Semiconductor Sales Office.

DESCRIPTION AND PURPOSE:

This is the Final notification announcing that ON Semiconductor is adding assembly and test manufacturing capacity for SOD-923 packaged products listed herein at ON Semiconductor's assembly/test factory located in Leshan, China. Existing package technologies within ON Semiconductor's product families are currently sourced from Leshan include SOD-323, SOD523, and SOD-723, and product families which include Zener Diodes, TVS/ESD Diodes, and Schottky Diodes. The SOD-923 package technology used for the products listed herein was initially qualified at AUK/Korea in 2006.

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RELIABILITY DATA SUMMARY:

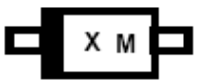
Reliability Test Results:

Test NAME	TEST CONDITIONS	SS x No. Lots	Result
Initial Electrical Prior To PC	per 48A spec	ALL	Pass
MSL1 Preconditioning	IR at 260°C	3 lots	Pass
High Temperature High Humidity Reverse Bias +PC	1008 Hr Ta=150C, Vr=80% rated V	80 x 3 lots	0 / 240
Temp Cycling-PC	1000 cycles Temp = -65°C to +150°C	80 x 3 lots	0 / 240
Autoclave-PC	96 Hrs 121°C/100% RH/15 PSIG	80 x 3 lots	0 / 240
Intermittent Op Life -PC	15000 cycles Ta=25C, delta Tj=100C max, Ton=Toff=2 min	80 x 3 lots	0 / 240
High Temperature Storage Life	1008 Hrs Ta=150C	80 x 3 lots	0 / 240
High Temperature Reverse Bias	1008 Hrs Ta=150C, Vr=80% rated V	80 x 3 lots	0 / 240

ELECTRICAL CHARACTERISTIC SUMMARY:
No changes in electrical characterization; all product performance meets current datasheet Specifications.

CHANGED PART IDENTIFICATION:
Devices marked with date code of April 2007 or newer may be from alternate site. Marking on this package is limited to only 2 characters due to its small size. The first character represents the device part number (see datasheet) and the second character is a single digit monthly date code. The 12-month sequence for odd years is 1 through 9, followed by T, V, C for January through December respectively. For even years, the 12-month sequence is E, F, H, J, K, L, N, P, U, X, Y, and Z. Either of the two marking characters may be rotated 90 deg depending on device type and manufacturing site as shown in below example.

For AUK manufacturing:



For Zener diode

Rotated 90 for
Schottky & Switching Diode

For Leshan manufacturing, the date code character (2nd character) will be rotated 90 degrees counter-clockwise.

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AFFECTED DEVICE LIST

ESD9X12ST5G
ESD9X3.3ST5G
ESD9X5.0ST5G
NSR0130P2T5G
NSR0140P2T5G
NSR0230P2T5G