ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION
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19-MAR-2002

SUBJECT: ON Semiconductor Final Product/Process Change Notification #12384

TITLE: Qualification of DO-41 Package Outline in place of DO-15 Package Outline.

EFFECTIVE DATE: 18-May-2002

AFFECTED CHANGE CATEGORY: Package Change

AFFECTED PRODUCT DIVISION: Bipolar Discretes Products

ADDITIONAL RELIABILITY DATA: Available
Contact your local ON Semiconductor Sales Office or Mark Wasilewski <RVGF20@onsemi.com >

SAMPLES: Contact Below
Contact your local ON Semiconductor Sales Office or Barbara Matteson <RM2230@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact Sales Office or Kevin Keller <R42065@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:
ON Semiconductor has qualified LiteOn's Seeful facility as an additional assembly/test site for our axial leaded products. In order to further standardize our axial package platform, ON Semiconductor has elected to adopt the DO-41 package outline in place of the DO-15 package outline. This change affects ultrafast, Schottky and SIDAC products. This change also will provide customers of these devices with equivalent performance in a smaller case outline. The LiteOn Seeful facility has been an ON Semiconductor qualified subcontractor since 1999. The two companies have a strong working relationship and past programs have proven very successful.

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RELIABILITY DATA SUMMARY:
Reliability Data and testing has been completed on three (3) qualification lots of DO-41 package. Qualification vehicles included two (2) lots of the MUR1100E (Highest Voltage, Largest Die Size Ultrafast Rectifier) and one (1) lot of MBR1100 (Highest Voltage, Largest Die Size Schottky Rectifier).

Tests performed and results were:

HTRB (High Temp Rev Bias) 0/80 0/80 0/80
(Tj=max, 80% bias voltage, 1008 hrs)

H3TRB (High Temp Humidity Rev Bias) 0/80 0/80 0/80
(85% RH, 85% bias, 85C, 1008 hrs)

TC (Temp Cycle) 0/80 0/80 0/80
(-65C to +150C, 15min dwells, 1000cy)

PTH (Pressure Temp Humidity) 0/80 0/80 0/80
(121C, 100%RH, 15PSIG, 96 Hrs)

ELECTRICAL CHARACTERISTIC SUMMARY:
Characterization data available upon request.

CHANGED PART IDENTIFICATION:
Differences between the DO-41, DO-15 and original Case 59-04 outlines are noted below. The devices' electrical characteristics will not change and the reliability will continue to meet ON Semiconductor's high quality standards.

Case	Lead Dia		Lead Length		Body Dia		Body Length	
	Min	Max	Min	Max		Min	Max	Min	Max
59-04	0.76	0.86	27.94	-		2.79	3.05	5.97	6.60
DO-15	0.71	0.86	25.40	-		2.60	3.60	5.80	7.60
DO-41	0.71	0.86	25.40	-		2.00	2.70	4.10	5.20

AFFECTED DEVICE LIST (WITHOUT SPECIALS)

PART
1N5817
1N5817RL
1N5818
1N5818RL
1N5819
1N5819RL
MBR1100
MBR1100RL
MBR130P
MBR130PRL
MBR140PRL
MBR150
MBR150RL
MBR160
MBR160RL
MKP1V120RL

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MKP1V130RL
MKP1V160
MKP1V160RL
MKP1V240
MKP1V240RL
MKP9V160RL
MUR105
MUR105RL
MUR110
MUR1100E
MUR1100ERL
MUR110RL
MUR115
MUR115RL
MUR120
MUR120RL
MUR130
MUR130RL
MUR140
MUR140RL
MUR150
MUR160
MUR160RL
MUR180E
MUR180ERL
MUR190E
MUR210
MUR2100E
MUR2100ERL
MUR210RL
MUR220
MUR220RL
MUR240
MUR240RL
MUR260
MUR260RL