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**UPDATE NOTIFICATION**  
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**11-DEC-2001**

**SUBJECT: ON Semiconductor Update Notification #12108**

**TITLE: Update Announcement for Qualification of Liteon Seefull Assembly/Test Site for Axial Leaded Product**

**EFFECTIVE DATE: 11-Dec-2001**

**AFFECTED CHANGE CATEGORY: Subcontractor Assembly / Test / Fab Site & Pkg Change**

**AFFECTED PRODUCT DIVISION: Bipolar Discretes Products Div**

**ADDITIONAL RELIABILITY DATA:** Available  
Contact your local ON Semiconductor Sales Office or Laura Rivers <S20636@onsemi.com>

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

**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**  
Contact Sales Office or Eileen Kim <RP0506@onsemi.com>

**DISCLAIMER:**  
Initial Product/Process Change Notification (IPCEN) -First Notification distributed to customers.  
Distributed at least 120 days from the effective date of the change.

Final Product/Process Change Notification (FPCEN) -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:**  
This is an update announcement for case outline Physical dimension corrections in reference to PCN#11499 (issued Aug15,2001) under section "Additional information: Physical Dimension".

Case outline	Current(59-04)		New(DO-15)	
	Min	Max	Min	Max
Units(mm)				
Lead Diameter	0.76	0.86	0.71	0.86
Lead Length	27.94	----	25.4	----
Body Diameter	2.79	3.05	2.60	3.60
Body Length	5.97	6.60	5.80	7.60

\*\*\*\*\* 11499 \*\*\*\*\*

ON Semiconductor is qualifying LiteOn's Seefull facility as an additional assembly/test site for our axial leaded rectifier, Zener/TVS, and thyristor product. This additional site will allow ON Semiconductor to continue to meet the high demand for our axial leaded product. The LiteOn Seefull 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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**QUALIFICATION PLAN:**

Qualification vehicle justification:

Technology	Package	Qual Vehicle	Lots Required	Voltage	Justification
Bi-dir TVS	Mosorb	1.5KE250CA	1 lot + 1 control	250	Largest die, highest voltage
Bi-dir TVS	Mosorb	1.5KE75CA	1 lot + 1 control	75	Mid voltage, largest die
Bi-dir TVS	Mosorb	1.5KE33CA	1 lot + 1 control	33	Low voltage, largest die
Bi-dir TVS	Mini-Mosorb	SA85CA	Characterization Only	85	Mid voltage, mid die
Bi-dir TVS	Sur-40	P6KE200CA	Characterization Only	200	2nd largest die, highest voltage
Uni-dir TVS	Mosorb	1.5KE250A	2 lots + 1 control	250	Largest die, highest voltage
Uni-dir TVS	Mini-Mosorb	SA170A	3 lots + 1 control	170	2nd largest die, highest voltage
Uni-dir TVS	Sur-40	P6KE200A	3 lots + 1 control	200	Highest voltage, mid die
Zener	Sur-30	1N5913B	2 lots + 1 control	3.3	Lowest voltage, alloy process
Zener	Sur-30	1N5956B	1 lot + 1 control	200	Highest voltage, smallest die
Schottky	1 Amp	MBR160	3 lots + 1 control	60	Smallest die, mid voltage
Schottky	3 Amp	MBR3100	3 lots + 1 control	100	Largest die in the package
Ultrafast	1 Amp	MUR1100E	3 lots + 1 control	1000	Largest die, highest voltage
Ultrafast	3 Amp	MUR4100E	3 lots + 1 control	1000	Largest die, highest voltage
Thyristor	1 Amp	MKP1V240	3 lots + 1 control	240	Largest die, highest voltage
Thyristor	3 Amp	MKP3B240	3 lots + 1 control	240	Largest die, highest voltage

**RELIABILITY DATA SUMMARY:**

Reliability data for Rectifier and Zener

Part Number	Auto clave 96hrs	HTRB 504 hrs	H3TRB 504 hrs	T/C 500 cyc	IOL 7500 cyc	Parame tric Verifi cation	Resist ance to Solvents	Resist ance to Solder Heat	Soldera bility
MBR3100	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
MUR4100E	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
MBR160	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
MUR1100E	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
1.5KE33CA	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30



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<b>Part Number</b>	<b>Auto clave 96hrs</b>	<b>HTRB 504 hrs</b>	<b>H3TRB 504 hrs</b>	<b>T/C 500 cyc</b>	<b>IOL 7500 cyc</b>	<b>Parame tric Verifi cation</b>	<b>Resist ance to Solvents</b>	<b>Resist ance to Solder Heat</b>	<b>Soldera bility</b>
1.5KE 75CA	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
1.5KE2 50CA	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
1.5KE 250A	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
SA170A	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
1N 5913B	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
1N 5956b	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30
P6KE2 00A	0/240	0/240	0/240	0/240	0/240	0/90	0/90	0/90	0/30

**Reliability data for Sidac**

<b>Part Number</b>	<b>Autoclave 96hrs</b>	<b>H3TRB 504hrs</b>	<b>T/C 500cyc</b>	<b>Resistance to Solder Heat</b>	<b>Solderability</b>
MKP3V240	0/240	0/240	0/240	0/30	0/30
MKP1V130	0/239	0/240	0/240	0/30	0/30

**Reliability Testing Conclusions:**

Test results meet all quality and reliability requirements.

**ELECTRICAL CHARACTERISTIC SUMMARY:**

The devices' electrical characteristics will not change significantly and the reliability will continue to meet ON Semiconductor's high quality standards.

**CHANGED PART IDENTIFICATION:**

Shipment of devices built at the Seefull facility will begin 28/OCT/01 and will be phased in over time. Identification of material built in the Seefull facility is possible by the site code "PK" marked on the part.

**ADDITIONAL INFORMATION:**

Case outline Units(mm)	Current(59-04)		New(DO-15)	
	Min	Max	Min	Max
Lead Diameter	0.76	0.86	0.71	0.86
Lead Length	27.94	----	25.4	----
Body Diameter	2.79	3.05	2.60	3.60
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**AFFECTED DEVICE LIST (WITHOUT SPECIALS):****PART**

1N5817, 1N5817RL, 1N5818, 1N5818RL, 1N5819  
1N5819RL, MBR1100, MBR1100RL, MBR130P, MBR130PRL  
MBR140PRL, MBR150, MBR150RL, MBR160, MBR160RL  
MBR3060, MBR3060RL, MKP1V120RL, 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, SA100A  
SA100ARL, SA10A, SA10ARL, SA110A, SA11A  
SA11ARL, SA120A, SA12A, SA12ARL, SA12CA  
SA12CARL, SA130A, SA130ARL, SA13A, SA13ARL  
SA13CA, SA13CARL, SA14A, SA14ARL, SA14CA  
SA14CARL, SA150A, SA150CA, SA15A, SA15ARL  
SA15CA, , PART, SA15CARL, SA160A  
SA160ARL, SA16A, SA16ARL, SA16RL, SA170A  
SA170ARL, SA17ARL, SA18A, SA18ARL, SA18CA  
SA18CARL, SA20A, SA20ARL, SA20CA, SA20CARL  
SA24A, SA24ARL, SA24CA, SA24CARL, SA24CATA  
SA26A, SA26ARL, SA28A, SA28ARL, SA28CA  
SA30A, SA30ARL, SA30CA, SA33A, SA33ARL  
SA33CARL, SA36A, SA36ARL, SA36CA, SA40A  
SA40ARL, SA43A, SA43CA, SA43CARL, SA45ARL  
SA45CARL, SA48A, SA48CA, SA48CARL, SA5.0A  
SA5.0ARL, SA51A, SA58A, SA6.0A, SA6.0ARL  
SA6.0CA, SA6.0CARL, SA6.5C, SA6.5CA, SA6.5CARL  
SA60A, SA60ARL, SA60CARL, SA64A, SA64CA  
SA7.0ARL, SA7.0CA, SA7.5A, SA7.5CA, SA7.5CARL  
SA70A, SA78A, SA78ARL, SA78CA, SA8.0A  
SA8.0ARL, SA8.5A, SA8.5CARL, SA85CA, SA9.0A  
SA9.0ARL, SA90A