



Title of Change:	Qualification of Die Technology Change from Open Junction Technology to Glass Passivation Technology for Standard Recovery Diode.							
Proposed first ship date:	8 June 2018 or earlier after customer approval							
Contact information:	Contact your local ON Semiconductor Sales Office or <norsahida.sahman@onsemi.com>							
Samples:	Contact your local ON Semiconductor Sales Office							
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Lalan.Ortega@onsemi.com>							
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.							
Change Part Identification:	There will be no change in device marking scheme. Clean date code will be advised later.							
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____							
Change Sub-Category(s):	<input type="checkbox"/> Manufacturing Site Change/Addition <input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____							
Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: SuZhou Good-Ark Electronics Co. Ltd.						
Description and Purpose:								
<p>This is a Final Product Change Notification announcing to customers that ON Semiconductor is qualifying glass passivated technology on Standard Recovery Diode.</p> <p>This change is being driven by tightening environmental restrictions. This situation has forced the discontinuation of the OJR production. Life time buys of OJR product will not be possible thus the equivalent glass passivated devices will be offered.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #92d050;"> <th style="width: 20%;"></th> <th style="width: 40%;">Before Change Description</th> <th style="width: 40%;">After Change Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Die</td> <td style="text-align: center;">Open junction technology</td> <td style="text-align: center;">Glass passivation technology</td> </tr> </tbody> </table> <p>The glass passivated devices will be using qualified BOM in assembly. There will be no change In part marking and part numbering. The GPP replacements will be qualified to commercial/industrial requirements. These devices are not qualified to automotive standards and are not recommended for automotive applications.</p>				Before Change Description	After Change Description	Die	Open junction technology	Glass passivation technology
	Before Change Description	After Change Description						
Die	Open junction technology	Glass passivation technology						



Reliability Data Summary:

QV DEVICE NAME: 1N4007RLG

RMS: S42892, S43659

PACKAGE: DO204AL

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	504 hrs	0 / 80
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0 / 80
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	7500 cyc	0 / 80
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0 / 80
AC	JESD22-A102	Ta = 121°C, RH = 100%, 15psig	96 hours	0 / 80
H3TRB	JESD22-A101	Ta = 85°C/85% RH, 80% max rated V	1008 hrs	0 / 80
RSH	JESD22- B106	Ta = 265C, 10 sec		0 / 30

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
1N4001G	1N4007RLG
1N4001RLG	1N4007RLG
1N4002G	1N4007RLG
1N4002RLG	1N4007RLG
1N4003G	1N4007RLG
1N4003RLG	1N4007RLG
1N4004G	1N4007RLG
1N4004RLG	1N4007RLG
1N4005G	1N4007RLG
1N4005RLG	1N4007RLG
1N4006FFG	1N4007RLG
1N4006G	1N4007RLG
1N4006RLG	1N4007RLG
1N4007FFG	1N4007RLG
1N4007G	1N4007RLG
1N4007RLG	1N4007RLG
SR4004ARLG	1N4007RLG



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle
1N4001G		1N4007RLG
1N4001RLG		1N4007RLG
1N4002G		1N4007RLG
1N4002RLG		1N4007RLG
1N4003G		1N4007RLG
1N4003RLG		1N4007RLG
1N4004G		1N4007RLG
1N4004RLG		1N4007RLG
1N4005G		1N4007RLG
1N4005RLG		1N4007RLG
1N4006FFG		1N4007RLG
1N4006G		1N4007RLG
1N4006RLG		1N4007RLG
1N4007FFG		1N4007RLG
1N4007G		1N4007RLG
1N4007RLG		1N4007RLG