

Final Product/Process Change Notification Document #:FPCN24561ZB Issue Date:05 Apr 2023

Title of Change:	Qualification of FRD Rectifiers, and other discrete products at onsemi Roznov, Czech Republic.	
	Quanification of FRD Rectifiers, and other discrete products at onsemi Roznov, czech Republic.	
Proposed Changed Material First Ship Date:	05 Oct 2023 or earlier if approved by customer	
Current Material Last Order Date:	N/A Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.	
Current Material Last Delivery Date:	Date: N/A   The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory	
Product Category:	Active components – Discrete components	
Contact information:	Contact your local onsemi Sales Office or Phuong.Hoang@onsemi.com	
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this chang notification. Samples delivery timing will be subject to request date, sample quantity and special custo packing/label requirements.	
Sample Availability Date:	30 Apr 2023	
PPAP Availability Date:	30 Apr 2023	
Additional Reliability Data:	Contact your local onsemi Sales Office or Jayoung.Hong@onsemi.com	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.	
Change Category		
Category	Type of Change	
Process - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor, New wafer diameter	
puipment Production from a new equipment/tool which uses the same basic technology (replace equipment or extension of existing equipment pool) without change of process.		

### **Description and Purpose:**

This notification is to inform the customers that onsemi qualified their FRD Rectifiers, and other discrete products at onsemi Roznov, Czech Republic.

Before Change Description		After Change Description
Wafer fab	onsemi Bucheon, Korea	onsemi Roznov, Czech Republic onsemi Bucheon, Korea
Wafer size	6 inch (150 mm) / 8 inch (200 mm)	8 inch (200 mm)

There are no product material changes and no product marking changes as a result of this change.



Reason / Motivation for Change:	Supply disruption		
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Roznov, Czech Republic		None	
Marking of Parts/ Traceability of Change:	Clean Date Code can be advised upon of request.		
Reliability Data Summary:			
QV DEVICE NAME: NFVA35065L32 (QV8-1)			

RMS: 83762, 84035 PACKAGE: ASPM27

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108, AQG324	Tj=175°C, 100% max rated V	1008 hrs	0/78
TC	JESD22-A104, AQG324	Ta= -40°C to +125°C	1000 сус	0/39
TS1	AQG324	Ta= -40°C to +125°C, transition <30sec	1000 сус	0/18
TS2	AQG324	Ta= -40°C to +125°C, transition <30sec, with heat sink	1000 сус	0/6
H3TRB	JESD22-A110	85°C, 85% RH, 18.8psig, bias 100V	1008 hrs	0/78
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/36

## QV DEVICE NAME: FGHL75T65MQD (QV8-2) RMS: \$85126

PACKAGE: TO-247

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=175°C, 80% rated V	1008hrs	0/231
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta=175°C	1008hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 5min	6000cyc	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	1000cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/30

# Onsemi

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#### QV DEVICE NAME: FGA60N65SMD (QV8-3) RMS: V85129 PACKAGE: TO-247 Condition Test Specification Interval Results HTRB JESD22-A108 Tj=175°C, 80% rated V 1008hrs 0/231 HTGB JESD22-A108 Ta=175°C, 100% max rated Vgss 1008 hrs 0/231 HTSL JESD22-A103 Ta=175°C 1008hrs 0/231 MIL-STD-750 Ta=+25°C, delta Tj=100°C IOL (M1037) 6000cyc 0/231 On/off = 5minAEC-Q101 TC JESD22-A104 Ta= -65°C to +150°C 1000cyc 0/231 0/231 HAST JESD22-A110 130°C, 85% RH, 18.8psig, bias 96hrs 130°C, 85% RH, 18.8psig, unbiased 96hrs 0/231 uHAST JESD22-A118 Ta = 265°C, 10 sec RSH 0/30 JESD22- B106 Required for through hole devices only QV DEVICE NAME: RHRG75120 (QV4) RMS: 68323, 68388 PACKAGE: TO-247 **Specification** Condition Interval Results Test HTRB JESD22-A108 Tj = 175°C, 80% max rated V 1008hrs 0/231 HAST JESD22-A110 130°C, 85%RH, 18.8 psig, bias 96hrs 0/231 uHAST JESD22-A118 130°C 85%RH 18.8 nsig unbiased 96hrs 0/231 000cyc 0/231

UTAST	JL3D22-A118	150 C, 85%KT, 18.8 psig, ulibiased	90113
TC	JESD22-A104	Ta = -55°C to +150°C	1000cyc
HTSL	JESD22-A103	Ta = 175°C	1008hrs
IOL	MIL STD750 (M 1037) AEC Q101	Ta=+25°C, delta Tj=100°C, on/off =5 min	6000 cyc
RSH	JESD22- B106	Ta=265°C, 10 sec	-

## NOTE: AEC-1pager is attached.

To view attachments:

1. Download pdf copy of the PCN to your computer

2. Open the downloaded pdf copy of the PCN

3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field

4. Then click on the attached file/s

## **Electrical Characteristics Summary:**

Electrical characteristics are not impacted.

0/231

0/231

0/90



## List of Affected Parts:

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Current Part Number	New Part Number	Qualification Vehicle
RURD620CCS9A-F085	NA	NFVA35065L32, RHRG75120
FFB20UP20DN-F085	NA	NFVA35065L32, RHRG75120
RURP1560-F085P	NA	NFVA35065L32, RHRG75120
RURP15100-F085P	NA	NFVA35065L32, RHRG75120
RURG5060-F085	NA	NFVA35065L32, FGHL75T65MQD
RURG3060-F085	NA	NFVA35065L32, FGHL75T65MQD
RURD4120S9A-F085	NA	NFVA35065L32, FGA60N65SMD
FGD3N60LSDTM	NA	NFVA35065L32, FGA60N65SMD