



Final Product/Process Change Notification

Document #:FPCN23428XB

Issue Date:08 Oct 2020

| | | |
|--|---|--|
| Title of Change: | Bucheon 8inch FRD rectifiers dual source in CZ4 | |
| Proposed First Ship date: | 14 Jan 2021 or earlier if approved by customer | |
| Contact Information: | Contact your local ON Semiconductor Sales Office or David.Zhu@onsemi.com | |
| PCN Samples Contact: | Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com >. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements. | |
| Additional Reliability Data: | Contact your local ON Semiconductor Sales Office or Byeongyeop.Lee@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 | |
| Marking of Parts/ Traceability of Change: | Affected products will be identified with date code | |
| Change Category: | Test Change, Wafer Fab Change | |
| Change Sub-Category(s): | Manufacturing Site Addition | |
| Sites Affected: | | |
| ON Semiconductor Sites | External Foundry/Subcon Sites | |
| ON Semiconductor Bucheon, Korea | None | |
| ON Semiconductor Roznov, Czech Republic | | |
| Description and Purpose: | | |
| Bucheon Korea 8inch FRD rectifier dual source in CZ4 Czech Republic. | | |
| | Before Change Description | After Change Description |
| Manufacturing locations for Wafer Fab and Probe Test | ON Semiconductor Bucheon, Korea | ON Semiconductor Bucheon, Korea ON Semiconductor Roznov, Czech Republic |
| There is no product marking change as a result of this change | | |

**Reliability Data Summary:**

QV1 DEVICE NAME: FGH75T65SHD-F155

RRF: 68330, 68385

PACKAGE: TO247

| Test | Specification | Condition | Interval | Result |
|-------|---------------------------------|--|----------|--------|
| HTRB | JESD22-A108 | Tj = 175°C , 100% max rated V | 1008 hrs | 0/77 |
| HAST | JESD22-A110 | 130°C, 85%RH, 18.8 psig, bias | 96hrs | 0/77 |
| UHAST | JESD22-A118 | 130°C, 85%RH, 18.8 psig, unbiased | 96hrs | 0/77 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/77 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/77 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/77 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/30 |

QV2 DEVICE NAME: FFA60UA60DN

RRF: 68327, 68386

PACKAGE: TO3P

| Test | Specification | Condition | Interval | Result |
|-------|------------------------------|--|----------|--------|
| HTRB | JESD22-A108 | Tj = 175°C , 80% max rated V | 1008 hrs | 0/77 |
| HAST | JESD22-A110 | 130°C, 85%RH, 18.8 psig, bias | 96hrs | 0/77 |
| UHAST | JESD22-A118 | 130°C, 85%RH, 18.8 psig, unbiased | 96hrs | 0/77 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/77 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/77 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/77 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/30 |

QV3 DEVICE NAME: FFH30S60STU

RRF: 68326, 68387

PACKAGE: TO247

| Test | Specification | Condition | Interval | Result |
|-------|---------------------------------|--|----------|--------|
| HTRB | JESD22-A108 | Tj = 175°C , 80% max rated V | 1008 hrs | 0/77 |
| HAST | JESD22-A110 | 130°C, 85%RH, 18.8 psig, bias | 96hrs | 0/77 |
| UHAST | JESD22-A118 | 130°C, 85%RH, 18.8 psig, unbiased | 96hrs | 0/77 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/77 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/77 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/77 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/30 |



QV4 DEVICE NAME: RHRG75120

RRF: 68323, 68388

PACKAGE: TO247

| Test | Specification | Condition | Interval | Result |
|-------|------------------------------|--|----------|--------|
| HTRB | JESD22-A108 | Tj = 175°C , 80% max rated V | 1008 hrs | 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 psig, unbiased | 96hrs | 0/231 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/231 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/231 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/231 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/90 |

All reliability result passed.

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

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**.

| Part Number | Qualification Vehicle |
|------------------|-----------------------|
| FGH40T65SPD-F155 | FGH75T65SHD-F155 |
| FGH40T65UPD | FGH75T65SHD-F155 |
| FGH75T65UPD | FGH75T65SHD-F155 |
| FGH75T65UPD-F155 | FGH75T65SHD-F155 |
| FGH75T65SHDTLN4 | FGH75T65SHD-F155 |
| RHRG30120 | RHRG75120 |
| RHRP30120-F102 | RHRG75120 |
| RHRP30120 | RHRG75120 |
| RHRG75120 | RHRG75120 |
| RHRP15120 | RHRG75120 |
| FGY40T120SMD | RHRG75120 |
| FFH75H60S | RHRG75120 |
| RHRP1560 | RHRG75120 |
| HGTG12N60C3D | RHRG75120 |
| RHRG1560CC | RHRG75120 |
| RHRP1560-F102 | RHRG75120 |



| | |
|-------------------|------------------|
| RHRP860 | RHRG75120 |
| RHRP860-F102 | RHRG75120 |
| RHRP3060 | RHRG75120 |
| HGTG20N60B3D | RHRG75120 |
| RHRG3060 | RHRG75120 |
| RHRG3060CC | RHRG75120 |
| RHRP3060-F102 | RHRG75120 |
| FGAF40N60SMD | RHRG75120 |
| ISL9K3060G3 | RHRG75120 |
| ISL9R3060G2 | RHRG75120 |
| ISL9R3060P2 | RHRG75120 |
| RHRP15120-F102 | RHRG75120 |
| RHRP8120 | RHRG75120 |
| RHRP8120-F102 | RHRG75120 |
| FGH40T120SMD-F155 | RHRG75120 |
| FGH40T120SMD | RHRG75120 |
| FFA60UA60DN | FFA60UA60DN |
| FFAF60UA60DN | FFA60UA60DN |
| FFAF30UA60S | FFA60UA60DN |
| FFPF30UA60S | FFA60UA60DN |
| FFH30S60STU | FFH30S60STU |
| FFP30S60STU | FFH30S60STU |
| FFH60UP60S | FFH30S60STU |
| FFH60UP60S3 | FFH30S60STU |
| RURG8060 | FFH30S60STU |
| FGA30N65SMD | FGH75T65SHD-F155 |
| FGA40N65SMD | FGH75T65SHD-F155 |
| FGA5065ADF | FGH75T65SHD-F155 |

Japanese translation of the notification starts here.
通知の日本語訳はここから始まります。

Note: The Japanese version is for reference only. In case of any differences between the English and Japanese version, the English version shall control.

注：日本語版は参照用です。英語版と日本語版の違いがある場合は、英語版が優先されます。



信頼性データの要約:

デバイス名: FGH75T65SHD-F155

RMS: 68330, 68385

パッケージ: TO247

| テスト | 仕様 | 条件 | 間隔 | 結果 |
|-------|------------------------------|--|----------|------|
| HTRB | JESD22-A108 | Tj = 175°C, 100% max rated V | 1008 hrs | 0/77 |
| HAST | JESD22-A110 | 130°C, 85%RH, 18.8 psig, bias | 96hrs | 0/77 |
| UHAST | JESD22-A118 | 130°C, 85%RH, 18.8 psig, unbiased | 96hrs | 0/77 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/77 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/77 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/77 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/30 |

デバイス名: FFA60UA60DN

RMS: 68327, 68386

パッケージ: TO3P

| テスト | 仕様 | 条件 | 間隔 | 結果 |
|-------|------------------------------|--|----------|------|
| HTRB | JESD22-A108 | Tj = 175°C, 80% max rated V | 1008 hrs | 0/77 |
| HAST | JESD22-A110 | 130°C, 85%RH, 18.8 psig, bias | 96hrs | 0/77 |
| UHAST | JESD22-A118 | 130°C, 85%RH, 18.8 psig, unbiased | 96hrs | 0/77 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/77 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/77 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/77 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/30 |

デバイス名: FFH30S60STU

RMS: 68326, 68387

パッケージ: TO247

| テスト | 仕様 | 条件 | 間隔 | 結果 |
|-------|------------------------------|--|----------|------|
| HTRB | JESD22-A108 | Tj = 175°C, 80% max rated V | 1008 hrs | 0/77 |
| HAST | JESD22-A110 | 130°C, 85%RH, 18.8 psig, bias | 96hrs | 0/77 |
| UHAST | JESD22-A118 | 130°C, 85%RH, 18.8 psig, unbiased | 96hrs | 0/77 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/77 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/77 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/77 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/30 |



デバイス名: RHRG75120

RMS: 68323, 68388

パッケージ: TO247

| テスト | 仕様 | 条件 | 間隔 | 結果 |
|-------|------------------------------|--|----------|-------|
| HTRB | JESD22-A108 | Tj = 175°C , 80% max rated V | 1008 hrs | 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 psig, unbiased | 96hrs | 0/231 |
| TC | JESD22-A104 | Ta = -55°C to +150°C | 1000 cyc | 0/231 |
| HTSL | JESD22-A103 | Ta = 175°C | 1008 Hrs | 0/231 |
| IOL | MIL STD750 (M 1037) AEC Q101 | Ta=+25°C, delta Tj=100°C,on/off =5 min | 6000 cyc | 0/231 |
| RSH | JESD22- B106 | Ta=265°C, 10 sec | | 0/90 |

すべての信頼性試験結果は合格しました。

電気的特性の要約:

電気的特性への影響はありません。

影響を受ける部品の一覧:

注: 部品一覧には標準部品番号 (既製品) のみが記載されています。本 PCN の影響を受けるカスタム部品番号は、PCN メールで提供される顧客個別の付録、または PCN カスタマイズポータルに記載されています。

| 部品番号 | 認定試験用ピークル |
|----------------|-----------|
| RHRG30120 | RHRG75120 |
| RHRP30120-F102 | RHRG75120 |
| RHRP30120 | RHRG75120 |
| RHRG75120 | RHRG75120 |
| RHRP15120 | RHRG75120 |
| FGY40T120SMD | RHRG75120 |
| FFH75H60S | RHRG75120 |
| RHRP1560 | RHRG75120 |
| HGTG12N60C3D | RHRG75120 |
| RHRG1560CC | RHRG75120 |
| RHRP1560-F102 | RHRG75120 |
| RHRP860 | RHRG75120 |
| RHRP860-F102 | RHRG75120 |
| RHRP3060 | RHRG75120 |
| HGTG20N60B3D | RHRG75120 |
| RHRG3060 | RHRG75120 |



| | |
|-------------------|------------------|
| RHRG3060CC | RHRG75120 |
| RHRP3060-F102 | RHRG75120 |
| FGAF40N60SMD | RHRG75120 |
| ISL9K3060G3 | RHRG75120 |
| ISL9R3060G2 | RHRG75120 |
| ISL9R3060P2 | RHRG75120 |
| RHRP15120-F102 | RHRG75120 |
| RHRP8120 | RHRG75120 |
| RHRP8120-F102 | RHRG75120 |
| FGH40T120SMD-F155 | RHRG75120 |
| FGH40T120SMD | RHRG75120 |
| FFA60UA60DN | FFA60UA60DN |
| FFAF60UA60DN | FFA60UA60DN |
| FFAF30UA60S | FFA60UA60DN |
| FFPF30UA60S | FFA60UA60DN |
| FFH30S60STU | FFH30S60STU |
| FFP30S60STU | FFH30S60STU |
| FFH60UP60S | FFH30S60STU |
| FFH60UP60S3 | FFH30S60STU |
| RURG8060 | FFH30S60STU |
| FGA30N65SMD | FGH75T65SHD-F155 |
| FGA40N65SMD | FGH75T65SHD-F155 |
| FGA5065ADF | FGH75T65SHD-F155 |
| FGH40T65SPD-F155 | FGH75T65SHD-F155 |
| FGH40T65UPD | FGH75T65SHD-F155 |
| FGH75T65UPD | FGH75T65SHD-F155 |
| FGH75T65UPD-F155 | FGH75T65SHD-F155 |
| FGH75T65SHDTLN4 | FGH75T65SHD-F155 |



Appendix A: Changed Products

D

| Product | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|-------------------|----------------------|-----------------------|-----------------|----------------------|
| FGH40T65SPD-F155 | | FGH75T65SHD-F155 | | |
| FGH40T65UPD | | FGH75T65SHD-F155 | | |
| RHRG30120 | | RHRG75120 | | |
| RHRP30120-F102 | | RHRG75120 | | |
| RHRP30120 | | RHRG75120 | | |
| RHRG75120 | | RHRG75120 | | |
| RHRP15120 | | RHRG75120 | | |
| FGY40T120SMD | | RHRG75120 | | |
| FFH75H60S | | RHRG75120 | | |
| RHRP1560 | | RHRG75120 | | |
| HGTG12N60C3D | | RHRG75120 | | |
| RHRG1560CC | | RHRG75120 | | |
| RHRP860 | | RHRG75120 | | |
| RHRP860-F102 | | RHRG75120 | | |
| RHRP3060 | | RHRG75120 | | |
| HGTG20N60B3D | | RHRG75120 | | |
| RHRG3060 | | RHRG75120 | | |
| RHRG3060CC | | RHRG75120 | | |
| RHRP3060-F102 | | RHRG75120 | | |
| FGAF40N60SMD | | RHRG75120 | | |
| ISL9K3060G3 | | RHRG75120 | | |
| ISL9R3060G2 | | RHRG75120 | | |
| ISL9R3060P2 | | RHRG75120 | | |
| RHRP8120 | | RHRG75120 | | |
| RHRP8120-F102 | | RHRG75120 | | |
| FGH40T120SMD | | RHRG75120 | | |
| FFAF60UA60DN | | FFA60UA60DN | | |
| FFPF30UA60S | | FFA60UA60DN | | |
| FGH75T65SHDTLN4 | | FGH75T65SHD-F155 | | |
| RHRP15120-F102 | | RHRG75120 | | |
| FGH40T120SMD-F155 | | RHRG75120 | | |
| FFA60UA60DN | | FFA60UA60DN | | |
| FFP30S60STU | | FFH30S60STU | | |
| FFH60UP60S | | FFH30S60STU | | |
| RURG8060 | | FFH30S60STU | | |
| FGA40N65SMD | | FGH75T65SHD-F155 | | |
| FFH30S60STU | | FFH30S60STU | | |
| FFH60UP60S3 | | FFH30S60STU | | |