

Final Product/Process Change Notification Document #:FPCN25107X

Issue Date:03 Mar 2023

| Title of Change: | Qualification of Shantou Huashan(SHEDCL) China as dual source for TO247 FS2 & FSIII Tech discrete IGBT | | |
|---|---|--|--|
| Proposed First Ship date: | 08 Jun 2023 or earlier if approved by customer | | |
| Contact Information: | Contact your local onsemi Sales Office or Charles.Jiang@onsemi.com | | |
| PCN Samples Contact: | Contact your local onsemi Sales Office. 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 onsemi Sales Office or Harper.Pan@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. onsemi 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: | The traceability of Marking will be maintained by assembly plant code, lot code and date code | | |
| Change Category: | Assembly Change, Test Change | | |
| Change Sub-Category(s): | Manufacturing Site Addition, Material Change | | |
| Sites Affected: | | | |
| onsemi Sites | External Foundry/Subcon Sites | | |
| None | SHANTOU HUASHAN Electronic Devices Co., Ltd., China | | |

Description and Purpose:

This FPCN is to inform onsemi has qualified Shantou Huashan (SHEDCL), China as an additional assembly and test site for selected TO247 FS2, FSIII discrete IGBT products, other than onsemi Suzhou. The addition of Shantou Huashan (SHEDCL), China will enable a more competitive business supports to the affected customers.

| | Before Change Description | After Change Description | |
|-----------------------------|--------------------------------|--|--|
| Die Attach | PB92.5SN5AG2.5 (onsemi Suzhou) | PB93.5SN5AG1.5 (Shantou Huashan (SHEDCL),China), PB92.5SN5AG2.5 (onsemi Suzhou) | |
| Assembly & Final Test Sites | onsemi Suzhou (onsemi Suzhou) | onsemi Suzhou (onsemi Suzhou), Shantou Huashan (SHEDCL),China | |

The traceability of marking will be maintained by assembly plant code, lot code and date code.

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Reliability Data Summary:

QV DEVICE NAME: FGY75T120SQDN

RMS: U88353 PACKAGE: TO-247

| Test | Specification | Condition | Interval | Results |
|-------|---------------|--|----------|---------|
| H3TRB | JESD22-A101 | Temp = 85C, RH=85%, bias = 100V max | 1008Hr | 0/240 |
| HTGB | JESD22-A108 | Tj = 175C for 1008 hrs, Vgss Bias = 20V | 1008Hr | 0/240 |
| HTRB | JESD22-A108 | Tj = 175C, bias = 80% of max rated =960V | 1008Hr | 0/240 |
| HTSL | JESD22-A103 | Ta =175C for 1008 hrs | 1008Hr | 0/240 |
| RSH | JESD22-B106 | Ta=268C 10 sec dwell B106 | 10s | 0/90 |
| TC | JESD22-A104 | Temp = -55°C to +150°C | 1000Cyc | 0/240 |
| UHAST | JESD22-A118 | Temp = 130C, RH=85%, ~ 18.8 psig | 96Hr | 0/240 |
| SD | J STD 002 | Ta=245C 5 sec dwell | 5s | 0/45 |

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 | |
|---------------|-----------------------|--|
| FGY100T65SCDT | FGY75T120SQDN | |
| FGY60T120SQDN | FGY75T120SQDN | |
| FGY75T120SQDN | FGY75T120SQDN | |
| FGY40T120SMD | FGY75T120SQDN | |

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Appendix A: Changed Products

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DIKG: DIGI-KEY

| Product | Customer Part Number | Qualification Vehicle | New Part Number | Replacement Supplier |
|---------------|----------------------|-----------------------|-----------------|----------------------|
| FGY60T120SQDN | | FGY75T120SQDN | | |
| FGY75T120SQDN | | FGY75T120SQDN | | |
| FGY40T120SMD | | FGY75T120SQDN | | |