**Product / Process Change Notice**

**Parts Affected:**

CPR5U-040 glass passivated ultra fast recovery rectifier.

**Reason for Change:**

To enhance product manufacturability.

**Extent of Change:**

The equipment used to apply glass slurry prior to high temperature cure was upgraded to improve repeatability and consistency. In addition, enhancements to the wafer process were implemented, seeking to optimize forward voltage and reverse characteristics (switching and leakage).

**Effect of Change:**

This change does not affect the form, fit, or function of the device.

**Effective Date of Change:**

May 15, 2020

**Sample Availability:**

Please contact your salesperson or manufacturer’s representative.

**Qualification:**

Standard evaluation and qualifications completed resulting in no performance differences compared to current product (see tests below).

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| --- | --- | --- | --- | --- | --- | --- |
|  |  | P/N: | CPR5U-040 |  | Package: | GPR-4AM |
|  |  |  |  |  |  |  |
| **No.** | | **Test** | **Conditions** (Reference standards are in bold) | **Qty** | **Pass/Fail** | **Test Results** |
| **1** | | **Device Life Tests** | | | | |
|  | A | **High Temperature Reverse Bias (HTRB)** | T=125°C, t = 1000 hours Bias Conditions per Device Datasheet **JESD22-A108** | 77 | Pass | 77/77 |
|  | B | **High Temperature Storage Life (HTSL)** | T=150°C, t = 1000 hours **JESD22-A103** | 77 | Pass | 77/77 |
|  | C | **Thermal Shock** | 100 cycles, dwell time = 5 min,  -65°C to +150°C, max transfer time = 20 sec. **JESD22-A106** | 77 | Pass | 77/77 |
|  | D | **Temperature Cycling (TC)** | -65°C to +150°C,  Tdwell = 15min, 1000 cycles  **MIL-STD-750 TM1051** | 77 | Pass | 77/77 |
|  | E | **Resistance To Solder Shock** | Pb free: T =270°C ±5°C, Dwell=7s +2/-0 Thru-hole devices submerge to case, **JESD22-B106** | 5 | Pass | 5/5 |
|  | F | **Solderability** | Steam Age: T=93°C +3/-5°C. Pb-free Dip: T=245°C +/-5°C, Dwell time = 5+/-0.5sec **MIL-STD-750 TM2026** | 15 | Pass | 15/15 |

As per JEDEC standard JESD46, Customer Notification of Product/Process Changes by Solid-State Suppliers, a lack of acknowledgement of a PCN within thirty (30) days constitutes acceptance of the change.

The undersigned acknowledges and accepts Central Semiconductor’s Product/Process Change Notification (PCN).

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| Company Name: |  |
| Address: |  |
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| Printed Name: |  |
| Title: |  |
| Signature: |  |
| Date: |  |