

Final Product/Process Change Notification Document #:FPCN25222X Issue Date:03 Mar 2023

| Title of Change: | Alternate die source for HCPL062Nx and HCPL063xx | |
|---|---|--|
| Proposed First Ship date: | 08 Jun 2023 or earlier if approved by customer | |
| Contact Information: | Contact your local onsemi Sales Office or Esther.Lau@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 ChangKit.Mok@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: | Datecode | |
| Change Category: | Alternate die qualification | |
| Change Sub-Category(s): | Material Change | |

| Sites Affected: | | |
|-----------------|-------------------------------|--|
| onsemi Sites | External Foundry/Subcon Sites | |
| None | None | |

Description and Purpose:

1. To introduce an alternate die source. All the affected part numbers are listed in this PCN.

Change table summary:

| Item | Current | After Change | |
|------|--|--|--|
| 1 | LED Die: Die from Supplier A, in Japan Die size: 0.24 x 0.24mm | LED Die: Die from Supplier A, in Japan Die size: 0.24 x 0.24mm or LED Die: Die from Supplier B, in Korea Die size: 0.25 x 0.25mm | |
| 2 | MPN Label: Diffused in: JP | MPN Label: Diffused in: JP Or MPN Label: Diffused in: KR | |

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Reason for change:

The qualification of the alternate die source is for flexible manufacturing planning and continuity of supply.

Reliability Data Summary:

| QV DEVICE NAME: | HCPL0639 | | |
|-----------------|------------|--|--|
| RMS: | 2208014897 | | |
| PACKAGE: | SO8 | | |

| Test | Specification | Condition | Interval | Results |
|---------------------------------|------------------------|---|----------------|---------|
| High Temperature Operating Life | JESD22-A108 | Ta=85°C, IF=20mA and IC=12mA | 1008 hours | 0/77 |
| Preconditioning | J-STD-020 JESD-A113 | MSL 1 @ 260°C, Pre TC, THB and AC or surface mount pkgs only | - | 0/231 |
| Temperature Cycling | JESD22-A104 | Ta= -40°C to +125°C | 1000 cycles | 0/77 |
| Temperature Humidity Bias | JESD22-A101 | 85°C, 85% RH, IC=IF=5mA | 1008 hours | 0/77 |
| Autoclave | JESD22-A102 | 121°C, 100% RH, 29.7psia, unbiased | 96 hours | 0/77 |

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 |
|-------------|-----------------------|
| HCPL062NR2 | HCPL0639 |
| HCPL062N | HCPL0639 |
| HCPL0639R2 | HCPL0639 |
| HCPL0639 | HCPL0639 |
| HCPL0638R2 | HCPL0639 |
| HCPL0638 | HCPL0639 |
| HCPL0637R2 | HCPL0639 |
| HCPL0637 | HCPL0639 |