V13-001-SD475420-0A

# Product Change Notice

Issue Date: 25th January 2013

Please be informed that Avago Technologies is making the following product changes on PLCC LEDs listed below:

Change Type:

Introduction of an alternate LED die source for PLCC LED part numbers.

Parts Affected:

| | | | | |
|---|---|---|---|---|
| HSMA-A101-S00J1 | HSML-A101-S00J1 | HSMA-A160-S7WJ1 | HSML-A101-S4WJ1 | QSMC-A148-Q8JJ1 |
| HSMA-A101-S3WJ1 | HSMZ-A100-R00J1 | HSMA-A161-S7WJ1 | HSML-A161-S4WJ1 | QSMC-A151-Q70J1 |
| HSMC-A100-Q70J1 | HSMZ-A100-T00J1 | HSMA-A401-U7VM1 | QSMA-A100-P5PJ2 | QSMC-A151-S00J1 |
| HSMC-A100-R20J1 | HSMZ-A100-T70J1 | HSMC-A100-Q30J1 | QSMA-A161-S7WJ1 | QSMC-A161-S00J1 |
| HSMC-A101-S00J1 | HSMA-A100-Q0PJ1 | HSMC-A401-U30M1 | QSMA-A162-S7WJ1 | QSME-A115-N82J1 |
| HSMC-A101-S30J1 | HSMA-A100-R2WJ1 | HSME-A100-P32J1 | QSMA-A172-R2WJ1 | |
| HSMC-A101-S40J1 | HSMA-A160-Q00J1 | HSML-A101-S40J1 | QSMC-A145-S30J1 | |

Description and Extent of Change:

The selected LED die source had undergone Avago Technologies's qualification process and is deemed suitable as alternate LED die source for PLCC LEDs.

Reasons for Change:

To ensure continuity of supply for part numbers.

Effect of Change on Fit, Form and Function

There is no effect on fit and function as per datasheet. Qualification and characterization have been conducted to ensure both current and alternate LED die source are comparable.

Effective Date of Change:

The shipment of alternate LED die source PLCC2 and PLCC 4 will begin on 25th February 2013. Alternate and current die source can be shipped in the same shipment.

Qualification Data:

PLCC 2

| Test Name | MIL-STD/JEDEC Reference | Test Conditions | Units Tested | Units Failed |
|---|---|---|---|---|
| Temperature Cycle | Avago Req | -55°C/100°C, 15 min dwell, 5 min transfer, 1000 cycles | 600 | 0 |
| Temperature Humidity Storage Life | Avago Req | $T_a$= 85°C, RH = 85%RH, 1000hrs | 336 | 0 |
| Temperature Humidity Operating Life | JESD22-A101 | $T_a$= 85°C, RH = 85%RH, (AlInGaP) 16mA, 1000hrs | 336 | 0 |
| Temperature Humidity Operating Life | JESD22-A101 | $T_a$= 85°C, RH = 85%RH, (InGaN) 13mA, 1000hrs | 336 | 0 |
| High Temperature Operating Life | JESD22-A108 | (AlInGaP) $T_a$ = 70°C, 26mA, 1000hrs | 336 | 0 |
| High Temperature Operating Life | JESD22-A108 | (InGaN) $T_a$ = 70°C, 16mA, 1000hrs | 336 | 0 |
| Temperature Humidity Reverse Bias | Avago Req. | $T_A$ = 85°C, 85%RH, $V_r$ = 4V for 1000 hours | 96 | 0 |

PLCC 4

| Test Name | MIL-STD/JEDEC Reference | Test Conditions | Units Tested | Units Failed |
|---|---|---|---|---|
| Temperature Cycle | Avago Req | -40°C/100°C, 15 min dwell, 5 min transfer, 1000 cycles | 600 | 0 |
| Temperature Humidity Storage Life | Avago Req | $T_a$= 85°C, RH = 85%RH, 1000hrs | 336 | 0 |
| Temperature Humidity Operating Life | JESD22-A101 | $T_a$= 85°C, RH = 85%RH, (AlInGaP) 22mA, 1000hrs | 336 | 0 |
| Temperature Humidity Operating Life | JESD22-A101 | $T_a$= 85°C, RH = 85%RH, (InGaN) 16mA, 1000hrs | 336 | 0 |
| High Temperature Operating Life | JESD22-A108 | (AlInGaP) $T_a$ = 55°C, 49mA, 1000hrs | 336 | 0 |
| High Temperature Operating Life | JESD22-A108 | (InGan) $T_a$ = 70°C, 22mA, 1000hrs | 336 | 0 |
| Temperature Humidity Reverse Bias | Avago Req. | $T_A$ = 85°C, 85%RH, $V_r$ = 4V for 1000 hours | 96 | 0 |

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.
Please contact your Avago Technologies field sales engineer or Contact Center (http://www.avagotech.com/contact/) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.