

Product Change Notice

Issue Date: 13Nov2009

Change Type:

Avago Technologies has qualified replacement dice of InGaN blue and green die for SMT Subminiature Lamps and has changed the data sheet on the viewing angle.

Parts Affected:

| |
|-----------------|
| HLMP-QM00-S0000 |
| HLMP-QM00-S0011 |
| HLMP-QM00-S0031 |
| HLMP-QB00-S0000 |
| HLMP-QB00-S0011 |
| HLMP-QB00-TU000 |
| HLMP-QB00-TU011 |
| HLMP-QB00-TUC11 |
| HLMP-QB00-TUC31 |

Description and Extent of Change:

The selected die shall be the replacement for current die using in blue and green Subminiature Lamps.

Reasons for Change:

To ensure the continuous supply of InGaN Subminiature Lamps.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

There is no change in term of fit & form.

All functional remains no change as per datasheet except for the viewing angle. Please refer to below for detail.

| Items | Summary |
|------------------------------|--|
| Color (λ_d) | No change as per datasheet. |
| Electrical (V_f & V_r) | No change as per datasheet. |
| ESD Threshold Voltage | No change as per datasheet. |
| Optical (I_v) | Min and max I_v no change as per datasheet. Typical I_v for green change from bin V and W to bin U and V. Typical I_v for blue change from bin T to bin T and U. |
| Viewing Angle | Change in Typical value, Existing = 20°; New = 12° |

Effective Date of Change:

The shipment of this replacement dice source will begin from 10 Dec 2009 onwards.

Qualification Data:

Qualification has been carried on and data will be available upon request.

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.