

Product Change Notice

Issue Date: 14 Mar 2013

Change Type:

Datasheet Specification Change Only

Parts Affected:

| | | | |
|----------------|----------------|----------------|----------------|
| ACPL-H342-000E | ACPL-H342-060E | ACPL-H342-500E | ACPL-H342-560E |
| ACPL-K342-000E | ACPL-K342-060E | ACPL-K342-500E | ACPL-K342-560E |

All associated options and specials will also be affected.

Description and Extent of Change:

Please refer to datasheet, publication number AV02-2526EN for the specification changes below.

Current Specifications

Table 3. Absolute Maximum Ratings

| Parameter | Symbol | Max. | Units | Notes |
|-----------------------------|----------------|------|-------|-------|
| Output IC Power Dissipation | P _O | 210 | mW | 3 |
| Total Power Dissipation | P _T | 255 | mW | 4 |

Notes:

- 3. Derate linearly above 85°C free-air temperature at a rate of 5.5 mW/°C.
- 4. Derate linearly above 85°C free-air temperature at a rate of 6.3 mW/°C. The maximum LED junction temperature should not exceed 125°C.

Table 7. Package Characteristics

| Parameter | Symbol | Min. | Typ. | Max. | Units | Test Conditions | Note |
|--|-----------------------------------|------|------|------|-------|--|------|
| LED-to-Ambient Thermal Resistance | R ₁₁ | 311 | | | °C/W | Thermal Model in Application Notes Below | |
| LED-to-Detector Thermal Resistance | R ₁₂ , R ₂₁ | 111 | | | | | |
| Detector-to-Ambient Thermal Resistance | R ₂₂ | 168 | | | | | |

New Specifications

Table 3. Absolute Maximum Ratings

| Parameter | Symbol | Max. | Units | Notes |
|-----------------------------|----------------|------|-------|-------|
| Output IC Power Dissipation | P _O | 500 | mW | 3 |
| Total Power Dissipation | P _T | 550 | mW | 4 |

Notes:

- 3. Derate linearly above 85°C free-air temperature at a rate of 12.5 mW/°C.
- 4. Derate linearly above 85°C free-air temperature at a rate of 13.75 mW/°C. The maximum LED junction temperature should not exceed 125°C.

Table 7. Package Characteristics

| Parameter | Symbol | Min. | Typ. | Max. | Units | Test Conditions | Note |
|--|-----------------------------------|------|--------|------|-------|--|------|
| LED-to-Ambient Thermal Resistance | R ₁₁ | | 145 | | °C/W | Thermal Model in Application Notes Below | 16 |
| LED-to-Detector Thermal Resistance | R ₁₂ , R ₂₁ | | 25, 38 | | | | |
| Detector-to-Ambient Thermal Resistance | R ₂₂ | | 46 | | | | |

Notes:

16. The device was mounted on a high conductivity test board as per JEDEC 51-7.

Reasons for Change:

The power dissipation limits and thermal resistances are adjusted to reflect the device's package true performance.

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

All other remaining electrical specifications in datasheet and physical characteristics have not been changed. No changes have been made to the product design and manufacturing process. Appropriate electrical characterization has been performed on representative products to ensure normal parametric distribution, consistent electrical performance. No change is required in customer's existing application with datasheet specifications change.

Effective Date of Change:

Datasheet changes take effect from 14 Mar 2013. Datasheet releases on Avago's website on 14 Mar 2013.

Qualification Data:

Data has been collected and verified.

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.