7F, No. 349, Sec. 2, Renhe Road, Dashi, Taoyuan, Taiwan (R.O.C) 335

Cat No.: 7-1S-1000-015

Revision: 3

AllnGaP LED DICE

Part NO.: AOC-109RxA Series

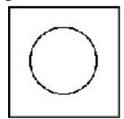
Features

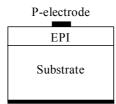
- Red Color Emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment

Description

AOC-109RxA series is a red color emitting AlInGaP LED grown by MOCVD technique. Its structure enables enhanced quantum efficiency and therefore a greater light intensity. This device is designed to suit the growing demand in the compact size electronic goods.

Chip Dimensions





Chip Size: 7.8mil×7.8mil±0.5mil Bonding Pad: \phi4.0mil±0.4mil Chip Thickness: 6.5mil±1.0mil

N-electrode

Specification and Optical Characteristics

| Measuring Item | Symbol | Condition | Min | Тур | Max | Unit |
|--|------------------|----------------------|------------------|-----|-------------------------|------------------------|
| Forward Voltage | V_{F} | I _F =20mA | 1.70 - | | 2.30 | V |
| Reverse Current | Ir | V _R =-5V | 1 | - | 1.0 | μ A |
| Dominant Wavelength | λd | I _F =20mA | 617 | - | 635 | nm |
| Max. Junction Temperature | T_{max} | - | ≤ 115 | | | $^{\circ}\!\mathbb{C}$ |
| Max. DC forward current | ${ m I_f}$ | $Ta = 25^{\circ}C$ | ≦ 30 | | | mA |
| Max. pulse forward current | $ m I_{fm}$ | Ta = 25°C | ≦ 60 | | | mA |
| (Pulse width 0.1 msec, frequency=1 kHz.) | 1m | 14 25 0 | | | | |
| Storage temperature | T_{stg} | Chip on tape | 0 ~ 40 | | $^{\circ}\! \mathbb{C}$ | |
| | | Only chip | - 40 ~ 80 | | | |

Available Dominate Wavelength and Iv Matrix

| Part No. | Wavelength | ≥ 30 | ≥ 40 | ≥ 50 | ≥ 60 | ≥ 70 | ≥ 80 | ≥ 90 | ≥ 100 | ≥ 110 |
|----------|--------------|------|------|------|------|------|------|------|-------|-------|
| | Range | mcd | mcd |
| 109 RSA | 616 ~ 625 nm | - | - | D | Е | F | G | Н | I | - |
| 109 RMA | 620 ~ 630 nm | - | С | D | Е | F | G | - | - | - |
| 109 RLA | 625 ~ 635 nm | В | С | D | Е | - | - | - | - | - |

Not:

- 1. All measurements are done with AOC's standard testing equipment.
- Luminance intensity is measured on bare chip.
 Above contents are subject to change without notice.
- Special requests are also welcome, please contact AOC's sale representative for any request.

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