

Cat No.: Revision:

7-1S-1000-043 2

AllnGaP LED DICE

Part NO.: AOC-112RxB Series

Features

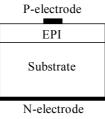
- Red Color Emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment

Description

AOC-112RxB 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 : 10.8mil×10.8mil±0.5mil Bonding Pad : ϕ 4.0mil±0.4mil Chip Thickness : 6.5mil±1.0mil

Specification and Optical Characteristics

| specification and optical characteristics | | | | | | | | | | |
|---|------------------|----------------------|---------------|---|-----|---------|--|--|--|--|
| Measuring Item | Symbol | Condition | Min Typ | | Max | Unit | | | | |
| Forward Voltage | $V_{\rm F}$ | I _F =20mA | 1.70 - 2.20 | | V | | | | | |
| Reverse Current | Ir | $V_R=-5V$ | - | - | 1.0 | μA | | | | |
| Dominant Wavelength | λd | I _F =20mA | 616 | - | 645 | nm | | | | |
| Max. Junction Temperature | T _{max} | - | \leq 115 | | | °C | | | | |
| Max. DC forward current | I_{f} | $Ta = 25^{\circ}C$ | \leq 50 | | | mA | | | | |
| Max. pulse forward current | I_{fm} | $Ta = 25^{\circ}C$ | \leq 100 | | | mA | | | | |
| (Pulse width 0.1 msec, frequency=1 kHz.) | III | | | | | | | | | |
| Storage temperature | T _{stg} | Chip on tape | 0~40 | | °C | | | | | |
| | | Only chip | $-40 \sim 80$ | | | | | | | |

Available Dominate Wavelength and Iv Matrix

| Part No. | Wavelength | ≥ 30 | ≥40 | ≥ 50 | ≥ 60 | ≥ 70 | ≥ 80 | ≥ 90 | ≥ 100 | ≥ 110 |
|----------|--------------|------|-----|------|------|------|------|------|-------|-------|
| | Range | mcd | mcd | mcd | mcd | mcd | mcd | mcd | mcd | mcd |
| 112 RSB | 616 ~ 625 nm | - | - | - | - | - | - | - | - | - |
| 112 RMB | 620 ~ 630 nm | - | С | D | Е | F | G | Н | - | - |
| 112 RLB | 625 ~ 635 nm | В | С | D | Е | F | - | - | - | - |

Not:

All measurements are done with AOC's standard testing equipment. 1

Luminance intensity is measured on bare chip. Above contents are subject to change without notice. 2. 3.

Special requests are also welcome, please contact AOC's sale representative for any request. 4