

AllnGaP LED DICE

Part NO.: AOC-S11RxM-Au Series

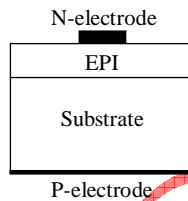
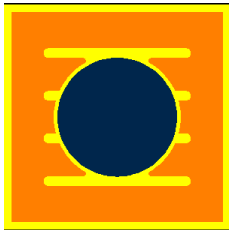
Features

- Red color emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment
- Mirror reflector to increase efficiency

Description

AOC-S11RxM Series is a red color emitting AllnGaP LED grown by MOCVD technique. Its structure enables enhanced quantum efficiency; the mirror reflector greatly increases the light extraction efficiency and therefore a greater light intensity. This device is designed for ultra-high brightness (UHB) automobile, display, and consumer electronic applications.

Chip Dimensions



Chip Size : 220 μ m \times 220 μ m \pm 25 μ m

Bonding Pad : ϕ 105 μ m \pm 10 μ m

Chip Thickness : 165 μ m \pm 25 μ m

Electrical and Optics Characteristics

| Measuring Item | Symbol | Condition | Min | Typ. | Max | Unit |
|--|------------------|----------------------------|------------|------|------|--------------------|
| Forward Voltage | V_F | $I_F=20\text{mA}$ | 1.75 | - | 2.40 | V |
| Reverse Current | I_R | $V_R=5\text{V}$ | - | - | 1.0 | μA |
| Dominant Wavelength | λ_d | $I_F=20\text{mA}$ | 616 | - | 630 | nm |
| Max. Junction Temperature | T_{max} | - | ≤ 120 | | | $^{\circ}\text{C}$ |
| Max. DC forward current | I_f | $T_a = 25^{\circ}\text{C}$ | ≤ 30 | | | mA |
| Max. pulse forward current (Pulse width 0.1 msec, frequency=1 kHz.) | I_{fm} | $T_a = 25^{\circ}\text{C}$ | ≤ 60 | | | mA |
| Storage temperature | T_{stg} | Chip on tape | 0 ~ 40 | | | $^{\circ}\text{C}$ |
| | | Only chip | -40 ~ 80 | | | |

Available Dominate Wavelength and Iv Matrix

| Part No. | Wavelength Range | ≥ 360 mcd | ≥ 400 mcd | ≥ 460 mcd | ≥ 520 mcd |
|----------|------------------|----------------|----------------|----------------|----------------|
| S11 RSM | 616 ~ 625 nm | - | Y40 | Y46 | - |
| S11 RMM | 620 ~ 630 nm | - | Y40 | Y46 | - |

Note:

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..
Characteristics curves are measured within TO-46 package

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