

# AllnGaP LED DICE

## Part NO.: AOC-108RxA-4mil Series

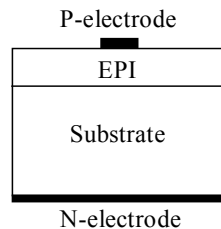
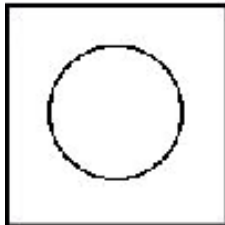
### Features

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

### Description

AOC-108RxA-4mil series is a red color emitting AllnGaP 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 : 6.3mil×6.3mil±0.5mil  
Bonding Pad : φ4.0mil±0.4mil  
Chip Thickness : 4.0mil±1.0mil

### Specification and Optical Characteristics

| Measuring Item   | Symbol           | Condition                  | Min        | Typ | Max  | Unit               |
|--|------------------|----------------------------|------------|-----|------|--------------------|
| Forward Voltage  | $V_F$            | $I_F=20\text{mA}$          | 1.70       | -   | 2.30 | V                  |
| Reverse Current  | IR               | VR=-5V                     | -          | -   | 1.0  | $\mu\text{A}$      |
| Dominant Wavelength  | $\lambda_d$      | $I_F=20\text{mA}$          | 617        | -   | 635  | nm                 |
| Max. Junction Temperature  | $T_{\text{max}}$ | -                          | $\leq 115$ |     |      | $^{\circ}\text{C}$ |
| Max. DC forward current  | $I_F$            | $T_a = 25^{\circ}\text{C}$ | $\leq 20$  |     |      | mA                 |
| Max. pulse forward current<br>(Pulse width 0.1 msec, frequency=1 kHz.) | $I_{\text{fm}}$  | $T_a = 25^{\circ}\text{C}$ | $\leq 40$  |     |      | mA                 |
| Storage temperature  | $T_{\text{stg}}$ | Chip on tape               | 0 ~ 40     |     |      | $^{\circ}\text{C}$ |
|  |                  | Only chip                  | -40 ~ 80   |     |      |                    |

### Available Dominate Wavelength and Iv Matrix

| Minimum Intensity<br>(@20mA) | IV ≥<br>20mcd | IV ≥<br>30mcd | IV ≥<br>40mcd | IV ≥<br>50mcd | IV ≥<br>60mcd | IV ≥<br>70mcd | IV ≥<br>80mcd | IV ≥<br>90mcd |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Grade                        | A             | B             | C             | D             | E             | F             | G             | H             |

Not:

1. All measurements are done with AOC's standard testing equipment.
2. Luminance intensity is measured on bare chip.
3. Above contents are subject to change without notice.
4. Special requests are also welcome, please contact AOC's sale representative for any request.
5. RxA represents anyone of RSA(616nm~625nm), RMA(620nm~630nm), RLA(625nm~635nm) and RRA(635nm~645nm).