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

Cat No.: 7-1S-2000-036

Revision:

AlinGaP LED DICE

Part NO.: AOC-T14YxM-Au Series

Features

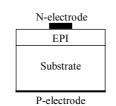
- Yellow color emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment
- Mirror reflector to increase efficiency

Description

AOC-T14YxM series is a yellow color emitting AlInGaP 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 : $355\mu m \times 355\mu m \pm 25\mu m$ Bonding Pad : $\phi 105 \mu m \pm 10 \mu m$ Chip Thickness: $165\mu m \pm 25\mu m$

Electrical and Optics Characteristics

| Measuring Item | Symbol | Condition | Min | Тур. | Max | Unit |
|--|------------------|----------------------|---------------|------------------|------------------------|---------|
| Forward Voltage | V_{F} | I _F =20mA | 1.75 | - | 2.40 | V |
| Reverse Current | Ir | V _R =5V | - | ı | 1.0 | μ A |
| Dominant Wavelength | λd | I _F =20mA | 582 | - | 598 | nm |
| Max. Junction Temperature | T_{max} | - | < 120 < 70 | | $^{\circ}$ C | |
| Max. DC forward current | I_{f} | Ta = 25°C | | | mA | |
| Max. pulse forward current | $ m I_{fm}$ | Ta = 25°C | < 140 | | | mA |
| (Pulse width 0.1 msec, frequency=1 kHz.) | 1 _{fm} | 1a 25 C | | | | |
| Storage temperature | T_{stg} | Chip on tape | 0 ~ 40 | | $^{\circ}\!\mathbb{C}$ | |
| | | Only chip | | -4 0 ~ 80 | | |

Available Dominate Wavelength and Iv Matrix

| | | U | | | | | |
|----------|------------------|----------|----------|----------|----------|----------|----------|
| Part No. | Wavelength Range | ≥280 mcd | ≥320 mcd | ≥360 mcd | ≥400 mcd | ≥440 mcd | ≥480 mcd |
| T14YSM | 582 ~ 594 nm | Y28 | Y32 | Y36 | Y40 | - | - |
| T14YLM | 592 ~ 598 nm | - | Y32 | Y36 | Y40 | Y44 | - |

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.