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

Cat No.: 7-1S-2000-035

Revision: 0

AllnGaP LED DICE

Part NO.: AOC-T140xM-Au Series

Features

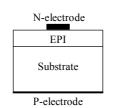
- Orange color emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment
- Mirror reflector to increase efficiency

Description

AOC-T14OxM series is a orange 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		2.40	V
Reverse Current	Ir	V _R =5V			1.0	μ A
Dominant Wavelength	λd	I _F =20mA	600	-	620	nm
Max. Junction Temperature	T_{max}	-	< 120		$^{\circ}\!\mathbb{C}$	
Max. DC forward current	I_{f}	$Ta = 25^{\circ}C$	< 70		mA	
Max. pulse forward current	Ī.	Ta = 25°C	< 140			mA
(Pulse width 0.1 msec, frequency=1 kHz.)	I_{fm}					
Storage temperature	$\mathrm{T_{stg}}$	Chip on tape	0 ~ 40			$^{\circ}$ C
		Only chip	- 40 ∼ 80			

Available Dominate Wavelength and Iv Matrix

Part No.	Wavelength Range	≥440 mcd	≥480 mcd	≥520 mcd	≥560 mcd	≥600 mcd
T14OSM	600 ~ 610 nm	Y44	Y48	Y52	Y56	-
T14OLM	610 ~ 620 nm	Y44	Y48	Y52	Y56	-

Note

- 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.

Characteristics curves are measured within TO-46 package.