7F, No. 349, Sec. 2, Renhe Road, Dashi, Taoyuan, Taiwan 320

Revision: P0

Cat No.:

# AlinGaP LED DICE

#### Part NO.: AOC-820YxM-Au Series

**PRELIMINARY** 

7-1S-2000-066

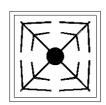
#### **Features**

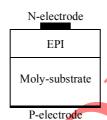
- Yellow color emission
- Excellent performance & high efficiency
- Great reliability even in harsh environment
- Mirror reflector to increase efficiency

## **Description**

AOC-820YxM 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**





Emitting Area: 20mil×20mil ± 1mil Bonding Pad: φ100μm ±10μm

Chip Thickness: 100μm ±10μm

# **Electrical and Optics Characteristics**

Measuring Item	Symbol	Condition	Min	Тур.	Max	Unit
Forward Voltage	$V_{\rm F}$	$I_F=150mA$	1.75	-	2.60	V
Reverse Current	Ir	$V_R=5V$	ı	-	1.0	$\mu$ A
Dominant Wavelength	λd	$I_F=150mA$	584	-	597	nm
Max. Junction Temperature	$T_{\text{max}}$	-	≦ 125		$^{\circ}\!\mathbb{C}$	
Max. DC forward current	$I_{\mathrm{f}}$	$Ta = 25^{\circ}C$	≦ 150		mA	
Storage temperature	Т	Chip on tape	0 ~ 40		$^{\circ}$ C	
Storage temperature	$T_{stg}$	Only chip	<b>-</b> 40 ∼ 80			

## Available Dominate Wavelength and Iv Matrix

Part No.	Wavelength	≥5000mcd	≥5500mcd	≥6000mcd	≥6500mcd
820 YxM	584 ∼ 597 nm	Y500	Y550	Y600	Y650

#### 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, different result may caused by packaging method.

The IV Bin Y500 is comparable to Epistar PX20 6300mcd

http://www.aocepi.com. Rev.00