

Cat No.: Revision:

# AllnGaP LED DICE

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

#### PRELIMINARY

#### **Features**

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

#### **Description**

AOC-820RxM series is a red/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**

×

N-electrode	Emitting Area : 20mil×20mil ± 1mil
EPI	Bonding Pad : $\phi 100 \mu m \pm 10 \mu m$
Moly-substrate	Chip Thickness : 100μm ±10μm

## **Electrical and Optics Characteristics**

Measuring Item	Symbol	Condition	Min	Тур.	Max	Unit
Forward Voltage	VF	I <sub>F</sub> =150mA	1.90	-	2.50	V
Reverse Current	Ir	Vr=5V	-	-	1.0	$\mu A$
Dominant Wavelength	λd	I <sub>F</sub> =150mA	618	-	627	nm
Max. Junction Temperature	T <sub>max</sub>	-	$\leq$ 125		°C	
Max. DC forward current	$I_{\rm f}$	$Ta = 25^{\circ}C$	$\leq$ 150		mA	
Storage termereture	T <sub>stg</sub>	Chip on tape	0 ~ 40		°C	
Storage temperature		Only chip		-40 ~ 80		U

## Available Dominate Wavelength and Iv Matrix

Part No.	Wavelength Range	≥4000mcd	≥4500mcd	≥5000mcd
820 RMM	618 ~ 627 nm	Y400	Y450	Y500

Note:

All measurements are done with AOC's standard testing equipment.

- 2. 3. Luminance intensity is measured on bare chip.
- Above contents are subject to change without notice. 4

P-electrode

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.



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