

# AllnGaP LED DICE

## Part NO.: AOC-S10YxM Series

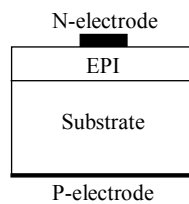
### Features

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

### Description

AOC-S10YxM Series is a yellow color emitting AllnGaP 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 : 210 $\mu$ m $\times$ 210 $\mu$ 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	Typ.	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	1.75	-	2.40	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	1.0	$\mu$ A
Dominant Wavelength	$\lambda_d$	I <sub>F</sub> =20mA	582	-	598	nm
Max. Junction Temperature	T <sub>max</sub>	-	$\leq$ 120			$^{\circ}$ C
Max. DC forward current	I <sub>F</sub>	T <sub>a</sub> = 25 $^{\circ}$ C	$\leq$ 30			mA
Max. pulse forward current (Pulse width 0.1 msec, frequency=1 kHz.)	I <sub>fm</sub>	T <sub>a</sub> = 25 $^{\circ}$ C	$\leq$ 60			mA
Storage temperature	T <sub>stg</sub>	Chip on tape	0 ~ 40			$^{\circ}$ C
		Only chip	-40 ~ 80			

### Available Dominate Wavelength and Iv Matrix

Part No.	Wavelength Range	$\geq$ 240 mcd	$\geq$ 280 mcd	$\geq$ 320 mcd	$\geq$ 360 mcd	$\geq$ 400 mcd
S10 YSM	582 ~ 594 nm	W	Y28	Y32	Y36	-
S10 YLM	592 ~ 598 nm	-	Y28	Y32	Y36	Y40

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.

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