

AlInGaP LED DICE

Part NO.: AOC-S12YxM-65 Series

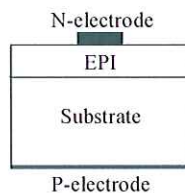
Features

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

Description

AOC-S12YxM-65 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 : 290 μ m \times 290 μ m \pm 25 μ m

Bonding Pad : ϕ 105 μ m \pm 10 μ m

Chip Thickness : 165 μ m \pm 25 μ m

Electrical and Optics Characteristics

Measuring Item	Symbol	Condition	Min	Typ.	Max	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	1.75	-	2.40	V
Reverse Current	I_R	$V_R=5\text{V}$	-	-	1.0	μA
Dominant Wavelength	λ_d	$I_F=20\text{mA}$	582	-	598	nm
Max. Junction Temperature	T_{max}	-	≤ 120			$^{\circ}\text{C}$
Max. DC forward current	I_f	$T_a = 25^{\circ}\text{C}$	≤ 50			mA
Max. pulse forward current (Pulse width 0.1 msec, frequency=1)	I_{fm}	$T_a = 25^{\circ}\text{C}$	≤ 100			mA
Storage temperature	T_{stg}	Chip on tape	0 ~ 40			$^{\circ}\text{C}$
		Only chip	-40 ~ 80			

Available Dominate Wavelength and Iv Matrix

Part No.	Wavelength Range	≥ 320 mcd	≥ 360 mcd	≥ 400 mcd	≥ 460 mcd	≥ 520 mcd
S12YSM-65	582 ~ 594 nm	Y32	Y36	Y40	Y46	-
S12YLM-65	592 ~ 598 nm		Y36	Y40	Y46	-

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.
5. Characteristics curves are measured within TO-46 package.

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