Cat No.: Revision:

#### 7-1S-1000-049 2

# AllnGaP LED DICE

# Part NO.: AOC-109RxC Series

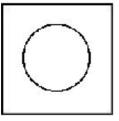
#### **Features**

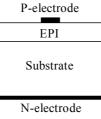
- Red Color Emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment

#### Description

AOC-109RxC series is a red color emitting AlInGaP LED grown by MOCVD technique. Its structure enables enhanced quantum efficiency and therefore a greater light intensity. This device is designed to suit the growing demand in the compact size electronic goods.

#### **Chip Dimensions**





Chip Size : 7.7mil×7.7mil±0.5mil Bonding Pad : \$\$.8mil±0.3mil Chip Thickness : 6.5mil±1.0mil

### **Specification and Optical Characteristics**

Measuring Item	Symbol	Condition	Min	Тур	Max	Unit
Forward Voltage	$\mathbf{V}_{\mathrm{F}}$	I <sub>F</sub> =20mA	1.70 - 2.30			V
Reverse Current	Ir	$V_R=-5V$	-	-	1.0	$\mu A$
Dominant Wavelength	λd	I <sub>F</sub> =20mA	616	-	645	nm
Max. Junction Temperature	T <sub>max</sub>	-	≦ 115			°C
Max. DC forward current	$I_{f}$	$Ta = 25^{\circ}C$	$\leq$ 30			mA
Max. pulse forward current	$I_{fm}$	$Ta = 25^{\circ}C$	$\leq 60$			mA
(Pulse width 0.1 msec, frequency=1 kHz.)	1 <sub>fm</sub>	1a 25 C				
Storage temperature	T <sub>stg</sub>	Chip on tape	$0 \sim 40$			°C
		Only chip				

### **Available Dominate Wavelength and Iv Matrix**

Part No.	Wavelength	≥ 80	≥90	≥ 100	≥110	≥ 120	≥130	≥ 140	≥150	≥160	≥170
	Range	mcd	mcd	mcd	mcd	mcd	mcd	mcd	mcd	mcd	mcd
109 RSC	$616\sim 625 \ nm$	-	-	-	J	K	L	М	-	-	-
109 RMC	$620\sim 630 \text{ nm}$	-	Н	Ι	J	K	-	-	-	-	-
109 RLC	$625\sim 635 \ nm$	-	-	-	-	-	-	-	-	-	-

Not:

All measurements are done with AOC's standard testing equipment. 1

2. Luminance intensity is measured on bare chip.

3. 4. Above contents are subject to change without notice

Special requests are also welcome, please contact AOC's sale representative for any request.