

1. Product Outline

a. Feature

- . Lead Frame Type LED Package (5.2 *6.0* t 1.3mm)
- . Beam Angle ($\Delta\theta$: 120°)
- . AlGInp, GaNAI2 O3 Chip & Long Time Reliability



b. Applications: Indoor, Outdoor Display and etc.,

2. Absolute Maximum Rating

Parameter	Symbol	Rating	Condition
Operating temperature	T _{op}	-40~+85 °C	--
Storage temperature range	T _{stg}	-40~+ 100 °C	--
Junction Temperature		110 ° C	--
Forward Current mA	T _j	180mA White 150mA Warm White	--
Peak Pulsed Forward Current	I _F	200mA	Duty 1/10 Pulse Width 10 ms
Reversed Voltage	I _{FR}	0.7 ~ 1.2V	I _r = 5mA
Thermal resistance, Junction to PCB	VR	20 K/W	--
Assembly Process Temp.	R _{th JS}	260 ° C < 10sec	--
ESD		5 KV	HBM

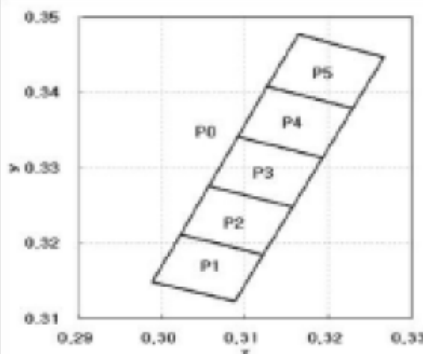
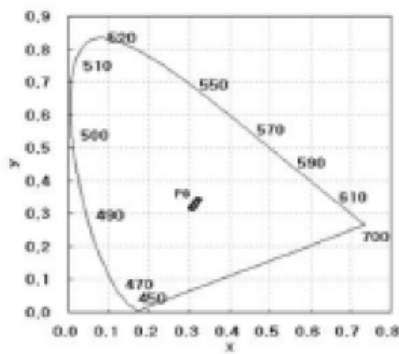
3. Characteristics

Electrical/Optical Characteristics

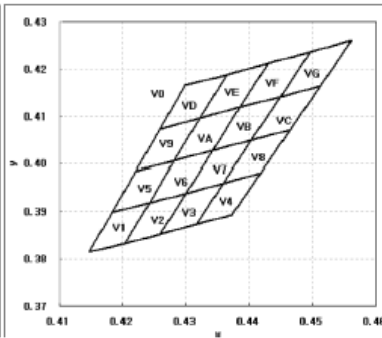
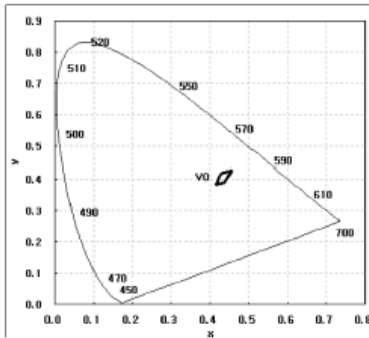
Ta. 25° C

Item	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage (*)	V _F	I _F = 150mA	2.9	3.2	--	V
Reverse Voltage	V _R	I _F = 5 mA	0.7	--	1.2	V
Color Rendering	R _a	I _F = 150 mA	78	--	--	R _a
Luminous Flux	W	180mA	--	45	50	Lumens
	WW	150mA	--	40	45	Lumens

4. Chromaticity Diagram (White)



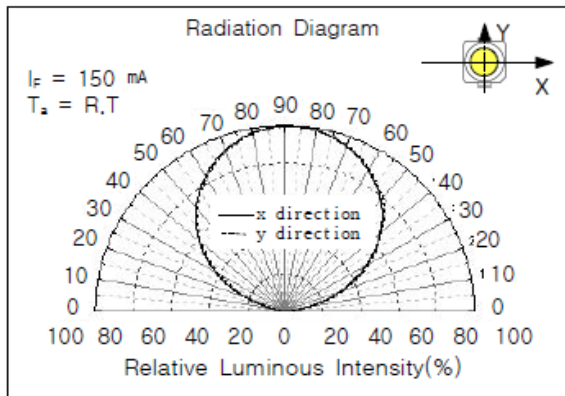
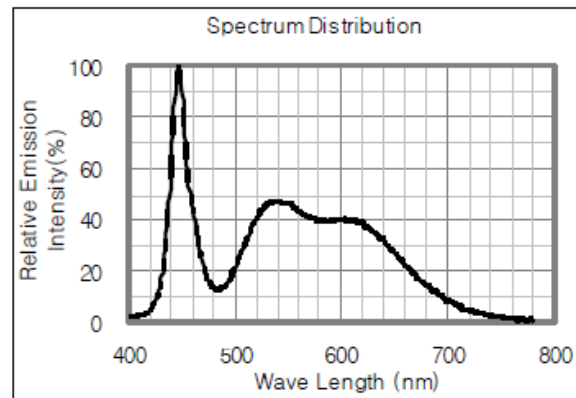
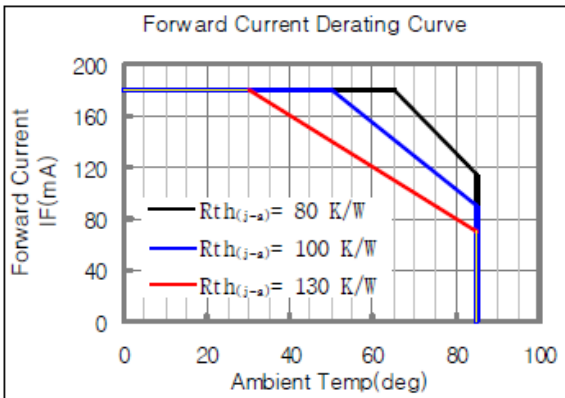
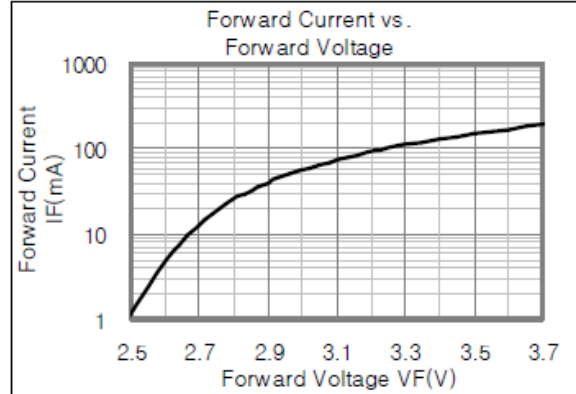
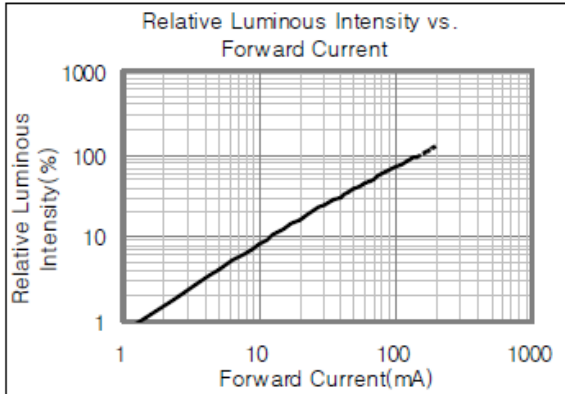
a. Chromaticity Diagram (Warm White)



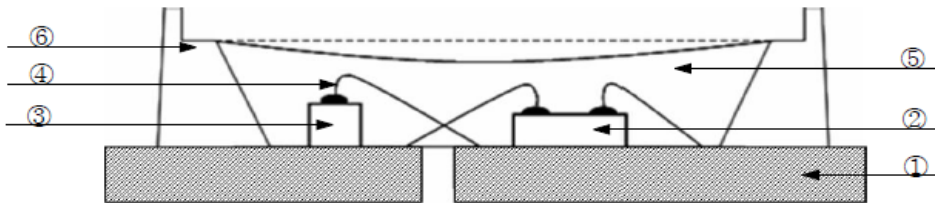
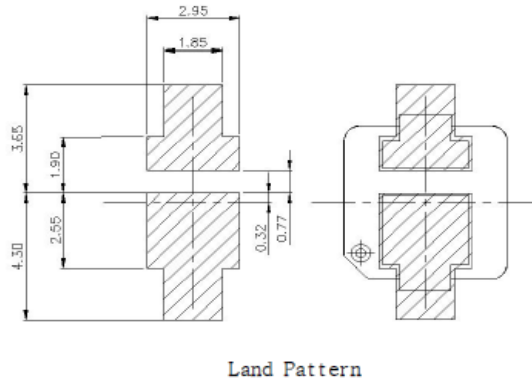
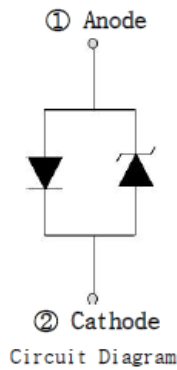
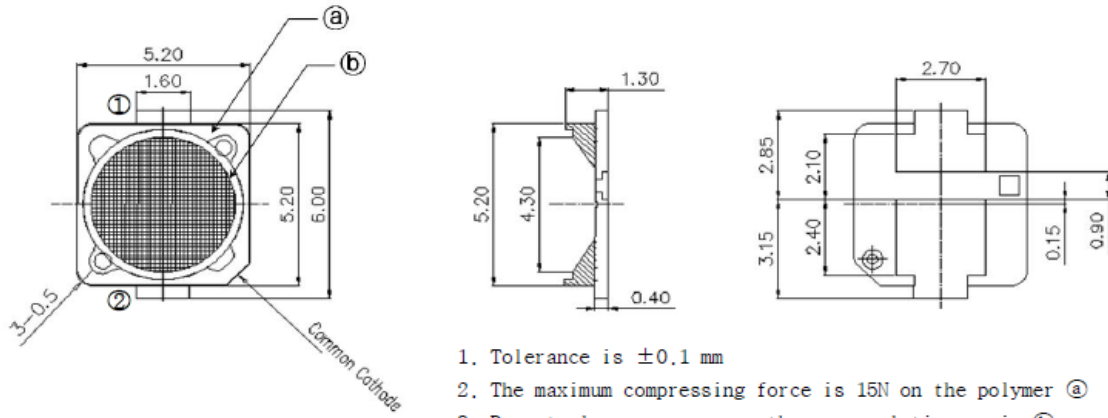
5. Typical Characteristics Graph

* These graphs show typical values.

($T_a : 25^\circ\text{C}$)



6. LED Package Outline Dimensions



NUMBER	ITEM	MATERIAL
①	FRAME	Copper Frame(Silver Plated)
②	LED CHIP	GaN/Al ₂ O ₃
③	Zener Diode	Si
④	WIRE	Gold Wire
⑤	RESIN	Silicone + Phosphor
⑥	PACKAGE	Liquid Crystal Polymer

kwality

KWALITY PHOTONICS PRIVATE LIMITED

ISO 9001-2008 29, EC Kushaiguda, Hyderabad-50 062, INDIA. PH:91-040-27123555,27136252

Email: sales@kwalityindia.com www.kwalityindia.com