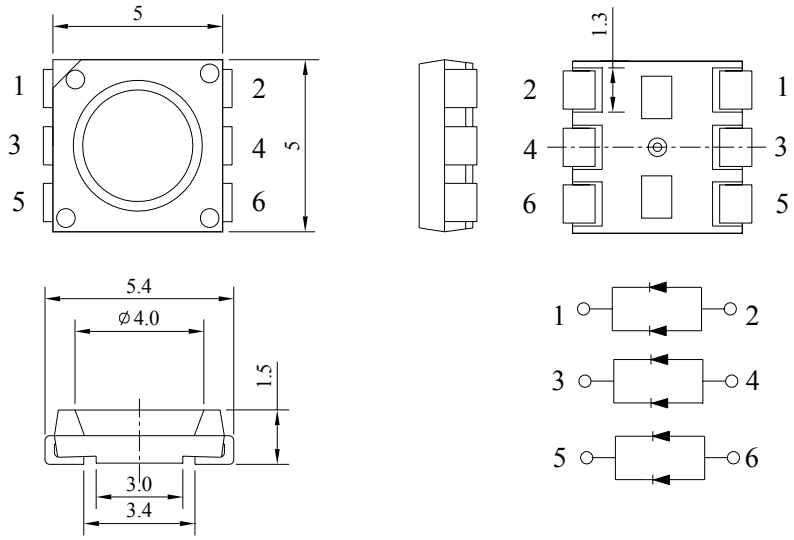
5.0 x 5.0 x 1.5mm SMD Type

RoHS Compliant

Package Dimensions:



* All dimensions are in mm
* Tolerance: ±0.25mm unless otherwise noted.

Ant Part No.	LED Chip		Lens Colour
	Material	Emitting Colour	
703-1044	AlGaInP / Sapphire	Warm White	Water Clear

Absolute Maximum Ratings at Ta=25°C:

Parameter	Symbol	Rating	Unit
Power Dissipation*	P_D	120	mW
Reverse Voltage*	V_R	5	V
D.C. Forward Current*	If	30	mA
Peak Current (1/10 Duty Cycle, 0.1ms Pulse Width)*	If (Peak)	100	mA
Operating Temperature Range	Topr.	-40 to +100	°C
Storage Temperature Range	Tstg.	-40 to +100	°C
Soldering Temperature	Tsld.	Dip Soldering: 260°C for 10sec. Hand Soldering: 350°C for 3sec.	
Electric Static Discharge Threshold (HBM)*	ESD	6000	V

* The values are based on 1 die performance.

5.0 x 5.0 x 1.5mm SMD Type

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Electrical & Optical Characteristics:

Parameter		Symbol	Condition	Value			Unit
				Min.	Typ.	Max.	
Luminous Intensity*2		Iv	IF = 40 mA*3	4800	10280	-	mcd
Luminous Flux*2		Φv	IF = 40 mA*3	-	23200	-	mlm
Forward Voltage*3		Vf	IF = 40 mA*3	-	3.2	4.0	V
Correlated Colour Temperature*2	25	CCT	IF = 20 mA*1	2500	-	2600	K
	26			2600	-	2700	
	27			2700	-	2900	
Reverse Current*1		IR	Vr = 5V*3	-	-	50	µA
View Angle*2		2θ½	IF = 40 mA*3	-	120	-	deg

Notes: 1. The data is tested by an IS tester.
2. Customer's special requirements are also welcome.
3. *1 for each die.
4. *2 when all LED dies are operated simultaneously.
5. *3 for one circuit.

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Typical Electrical / Optical Characteristic Curves:
(25°C Ambient Temperature unless otherwise noted)

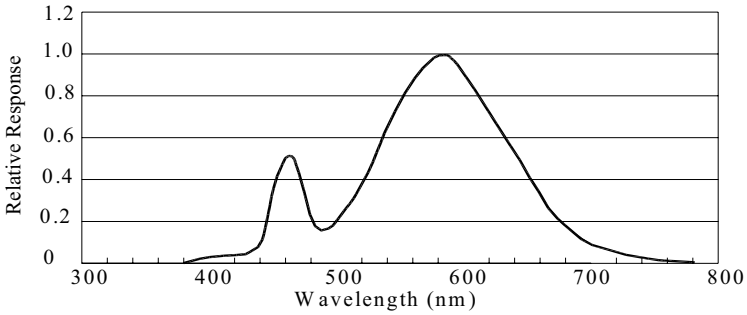
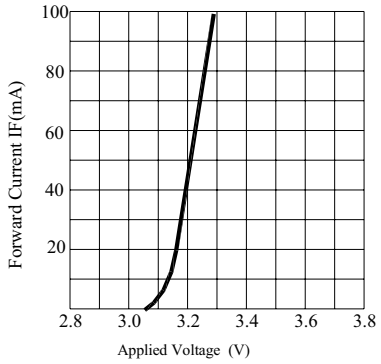
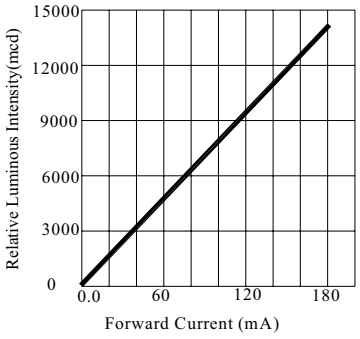


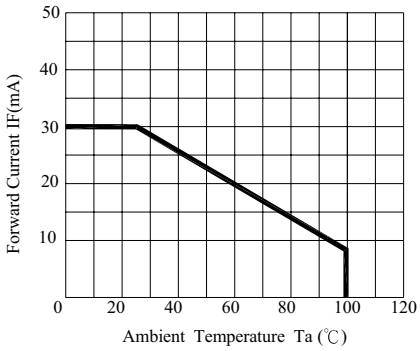
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



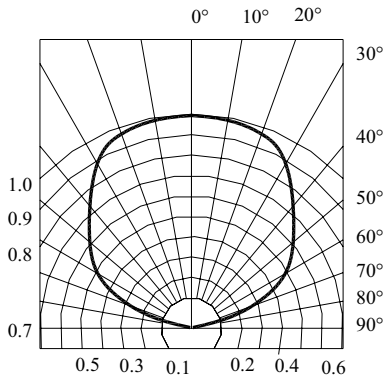
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Intensity



Ambient Temperature VS. Forward Current



Radiation Diagram

5.0 x 5.0 x 1.5mm SMD Type

RoHS Compliant

Storage:

Recommended storage environment:

- Temperature: 5°C ~ 30°C (41°F ~ 86°F)
- Humidity: 60% RH Max.
- Moisture measures: Please refer to Moisture-sensitive label on reels package bags. If unused LEDs remain, they should be stored in moisture proof packages, such as a sealed container with packages of moisture absorbant material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal it again (fold the open bag firmly shut and keep in a dry environment.

Soldering:

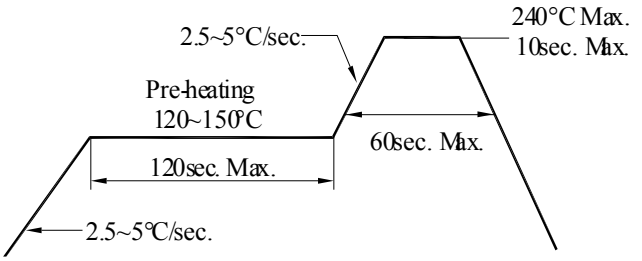
Reflow Soldering			Hand Soldering	
	Lead Solder	**Lead-free Solder**		
Pre-heat	120 ~ 150°C	180 ~ 200°C	**Temperature**	350°C Max.
Pre-heat Time	120sec. Max.	120sec. Max.	**Soldering Time**	3sec. Max. (one time only)
Peak Temperature	240°C Max.	260°C Max.		
Soldering Time	10sec. max.	10sec. Max.		
Condition	Refer to Temperature-profile 1	Refer to Temperature-profile 2		

* After reflow soldering rapid cooling should be avoided.

Temperature-profile (Surface of circuit board):

Use the following conditions shown in the figure.

<1 : Lead Solder>



<2 : Lead-free Solder>