

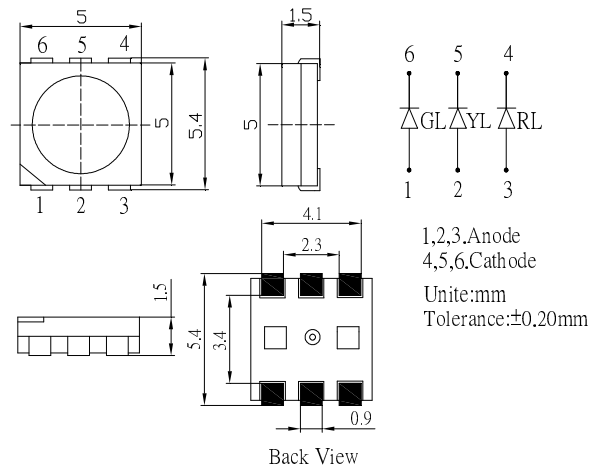
■Features

- High Luminous PLCC6 Top SMD LEDs
- 5.0x5.0x1.5mm Standard Directivity
- Superior Weather-resistance
- UV Resistant Silicone
- Water Clear Type

■Applications

- Toys/Games/Audio
- Small Area Illuminations
- Back Lighting/Other Lighting

■Outline Dimension



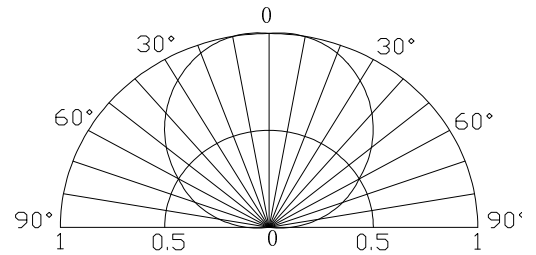
■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value		Unit
		Red/Yellow	Green	
DC Forward Current	I _F	50	30	mA
Pulse Forward Current*	I _{FP}	120	100	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	130	108	mW
Operating Temperature	T _{opr}	-30 ~ +85		°C
Storage Temperature	T _{stg}	-40 ~ +100		°C
Lead Soldering Temperature	T _{sol}	260°C/5sec		-

*Pulse width Max.10ms Duty ratio max 1/10

■Directivity



■Electrical -Optical Characteristics

(Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage	V _F (R/Y)	I _F =20mA	1.8	2.1	2.6	V
	V _F (G)	I _F =20mA	2.9	3.1	3.6	V
DC Reverse Current	I _R	V _R =5V	-	-	10	μA
Domi. Wavelength*	λ _D (Red)	I _F =20mA	620	625	630	nm
	λ _D (YL)	I _F =20mA	585	590	595	nm
	λ _D (Green)	I _F =20mA	520	525	530	nm
Luminous Intensity*	I _v (Red)	I _F =20mA	750	900	-	mcd
	I _v (YL)	I _F =20mA	750	900	-	mcd
	I _v (Green)	I _F =20mA	800	1120	-	mcd
50% Power Angle	2θ _{1/2}	I _F =20mA	-	120	-	deg

*1 Tolerance of dominant wavelength is ±1nm

*2 Tolerance of luminous intensity is ±15%

Precautions in Use for Surface Mount Diode

■ Storage

· Storage Conditions

Before opening the package:

The LEDs should be kept at 30°C or less and 60%RH or less. The LEDs should be used within a year. When storing the LEDs, moisture proof packaging with absorbent material (silica gel) is recommended.

· After opening the package:

Soldering should be done right after opening the package (within 24hrs).

Keeping of a fraction, sealing and Temperature: 5~40°C Humidity: Less than 30%.

If the package has been opened more than 1 week or the color of desiccant changes, components should be dried for 10-12hrs, at 60±3°C.

· Optosupply LED electrode sections are comprised of a silver plated copper alloy. The silver surface may be affected by environments which contain corrosive gases and so on. Please avoid conditions which may cause the LED to corrode, tarnish or discolor. This corrosion or discoloration may cause difficulty during soldering operations. It is recommended that the User use the LEDs as soon as possible.

· Please avoid rapid transitions in ambient temperature, especially in high humidity environments where condensation can occur.

■ Soldering Heat Reliability :

Reflow soldering Profile

· Reflow soldering should not be done more than two times.

· When soldering, do not put stress on the LEDs during heating.

· After soldering, do not warp the circuit board.

· Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the

characteristics of the LEDs will or will not be damaged by repairing.

Solder=Lead Free
Average ramp-up rate = 3°C/sec. max.
Preheat temperature: 140°~180°C
Preheat time = 120 sec. max.
Ramp-down rate = 6°C/sec. max.
Peak temperature = 245°C max.
Time within 3°C of actual peak temperature = 25 sec. max.
Duration above 210°C is 40 sec. max.

