

Feature

SDS-P65050RGB

- Chip Type Full Color LED
- PLCC-6 5x5 standard package
- High reliability package
- Wide viewing angle **120** Degree
- Available in 12 mm carrier tape on 7 inch reel (1000 pieces)

Specification

Absolute Maximum Ratings:

Ta = 25°C

Item	Symbol	Absolute Maximum Rating			Unit
		Red	Pure-Green	Blue	
DC Forward Current	I _F	30	25	25	mA
Peak Pulsed Forward Current ※	I _{FP}	100	100	100	mA
Reverse Voltage	V _R	5	5	5	V
Power Dissipation Single Color	P _d				mW
Total Power Dissipation ※※	P _{tot}	250			mW
Human Body Mode	H _{bm}	>1000			KV
Operating Temperature	T _{opr}	-30 ~ +85			°C
Storage Temperature	T _{stg}	-40 ~ +100			°C
Solder Temperature	T _{sol}	Reflow soldering:260°C for 5 Sec Hand soldering:350°C for 3 Sec			

※ I_{FP} Conditions: Pulse width ≤ 10msec. and duty ≤ 1/10

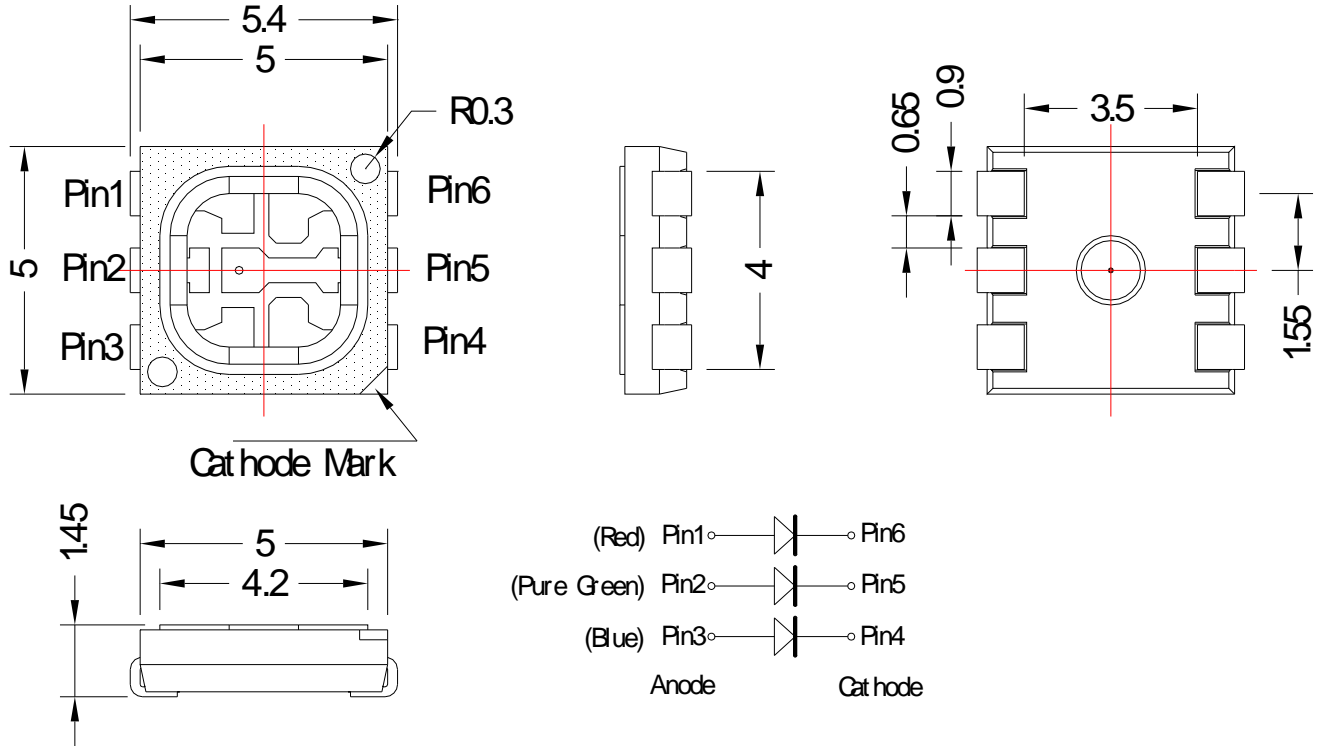
※※ Value for total power dissipation when two or more device are lit simultaneously

Electrical / Optical Characteristics

Ta = 25°C

Item	Symbol	Condition	Red			Pure-Green			Blue			Unit
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
Forward Voltage	V _F	I _F =20mA		2.0	2.4		3.2	3.6		3.2	3.6	V
Reverse Current	I _R	V _R =5V	-	-	50		-	50	-	-	50	μA
Luminous Intensity	I _v	I _F =20mA	0.25	0.4		0.7	1.2		0.18	0.3		cd
Luminous Flux	φ _v	I _F =20mA		1.2			3.8			1.0		lm

Package Dimensions



Item	Materials
Package	Heat-Resistant Polymer
Encapsulating Resin	Silicone
Electrodes	Ag Plating Copper Alloy

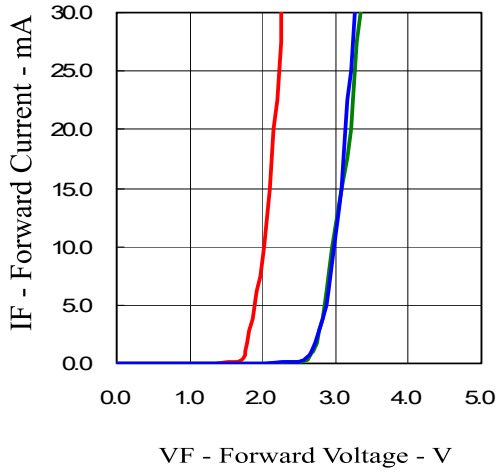
NOTES: _

ALL DIMENSIONS IN mm._

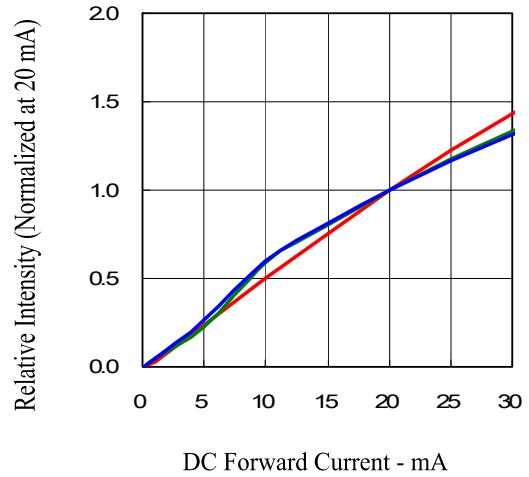
ELECTRICAL CONNECTION BETWEEN ALL CATHODES IS RECOMMENDED.

Electrical-Optical Characteristics

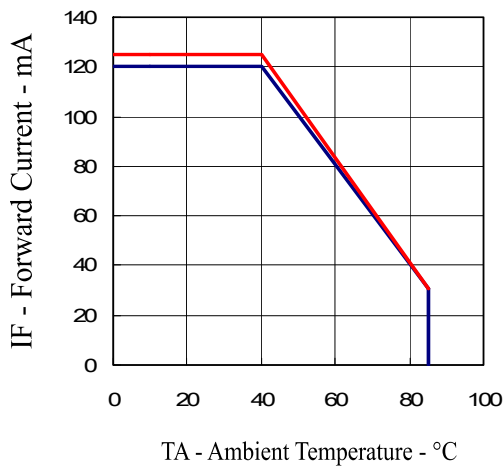
Forward Current vs. Forward Voltage



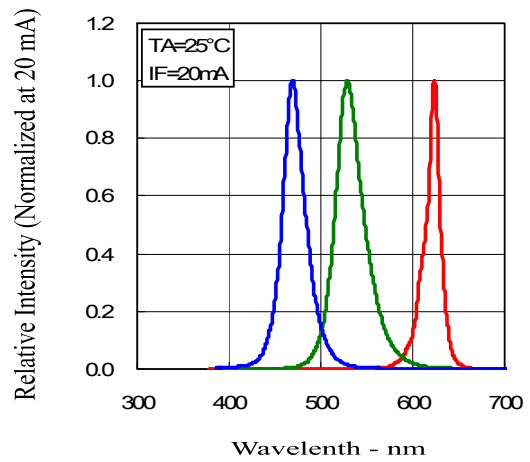
Relative Intensity vs. Forward Current



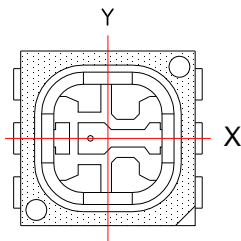
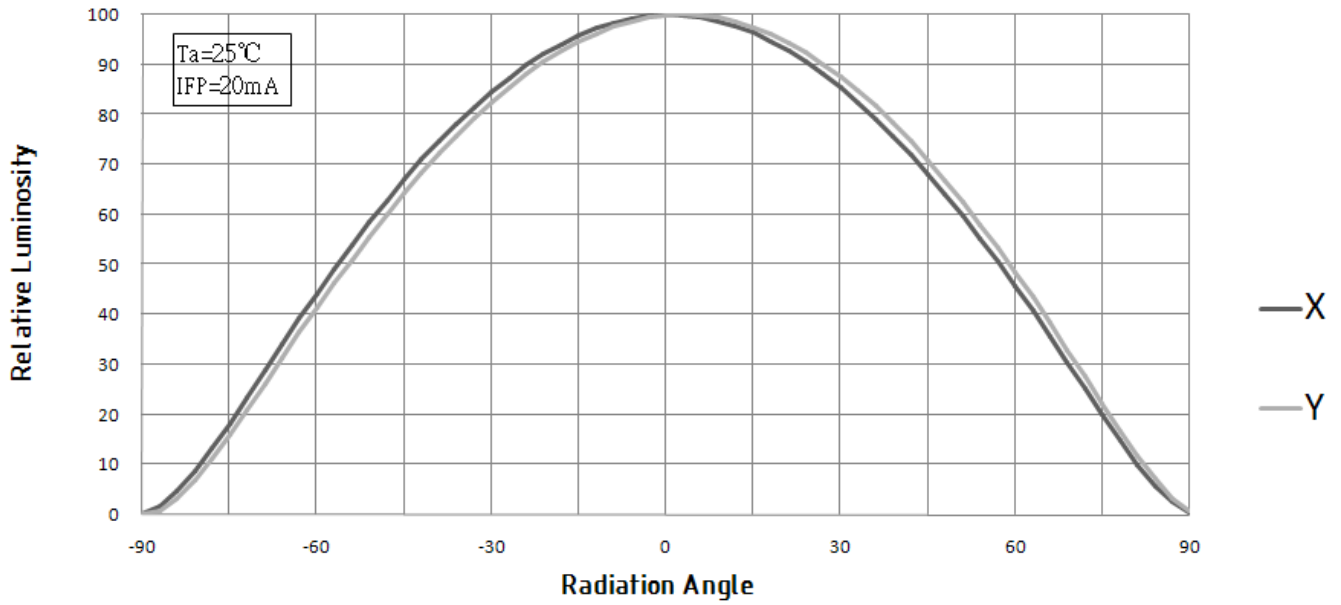
Forward Current vs. Ambient Temperature



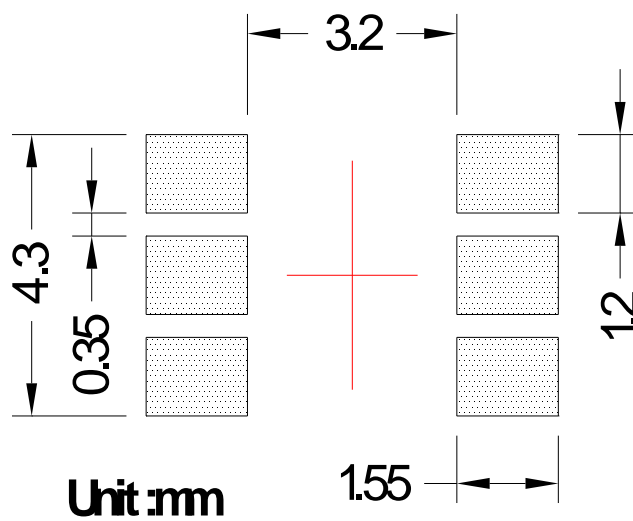
Relative Intensity vs. Wavelength



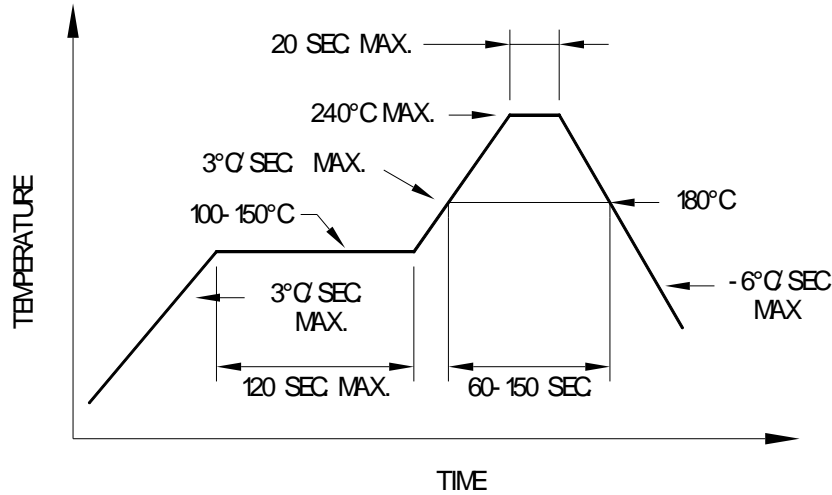
Radiation Pattern



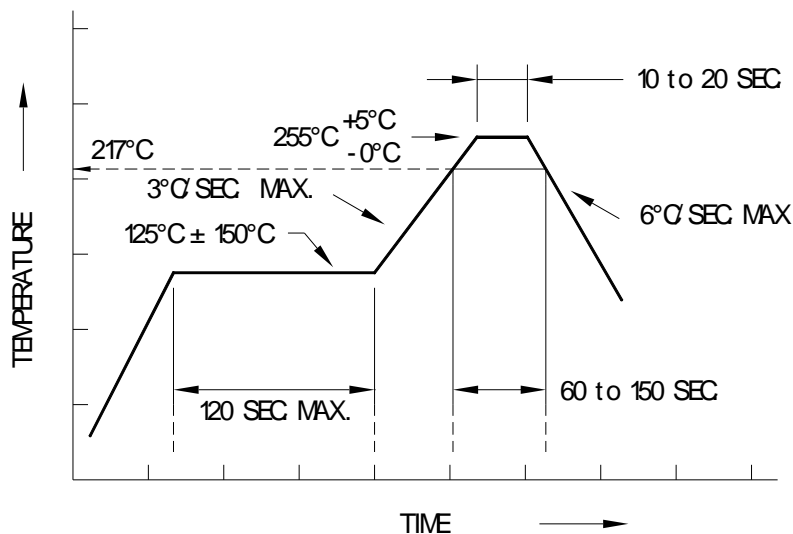
Recommended soldering pad pattern



Soldering Conditions



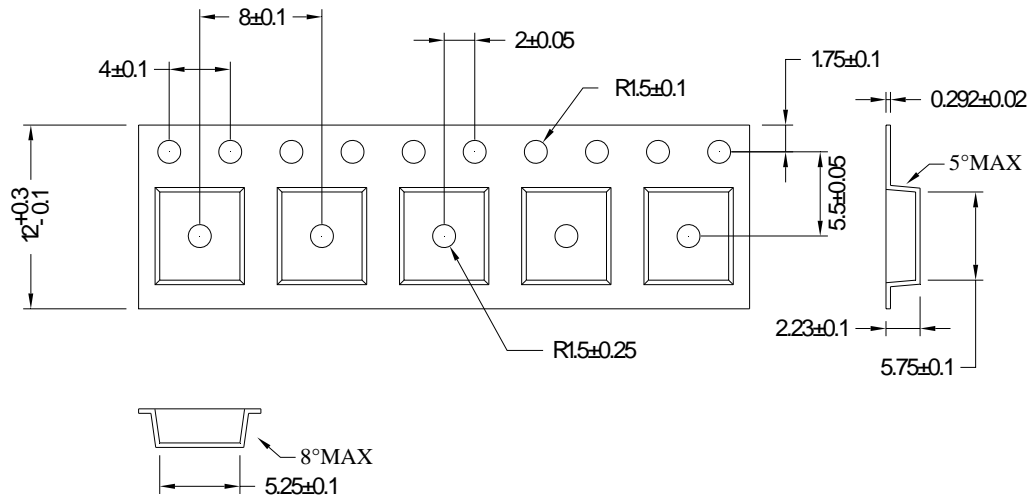
Recommended reflow soldering profile



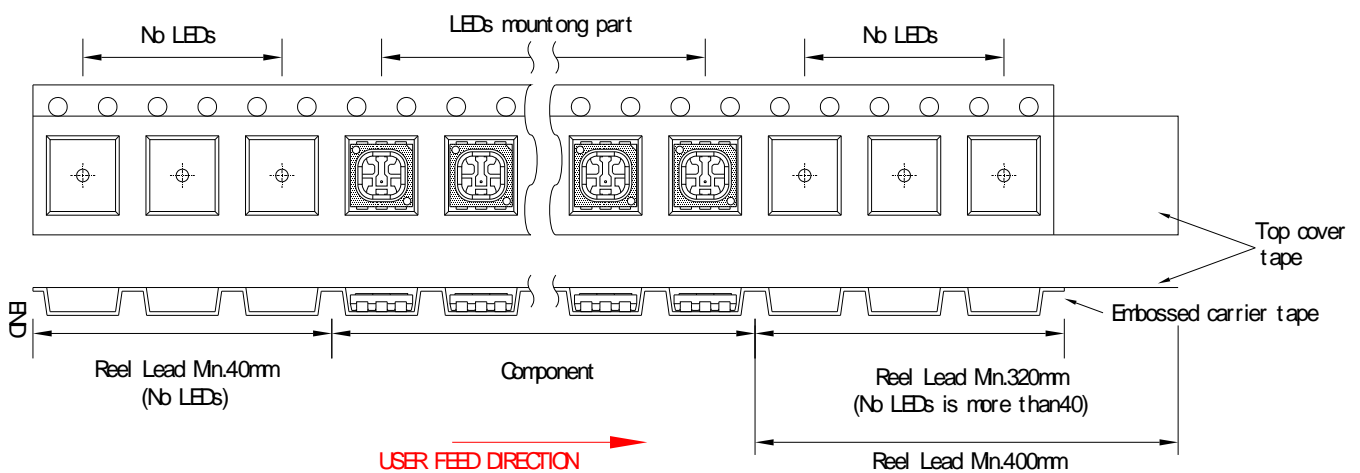
Recommended Pb-free reflow soldering profile

- 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.
- 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

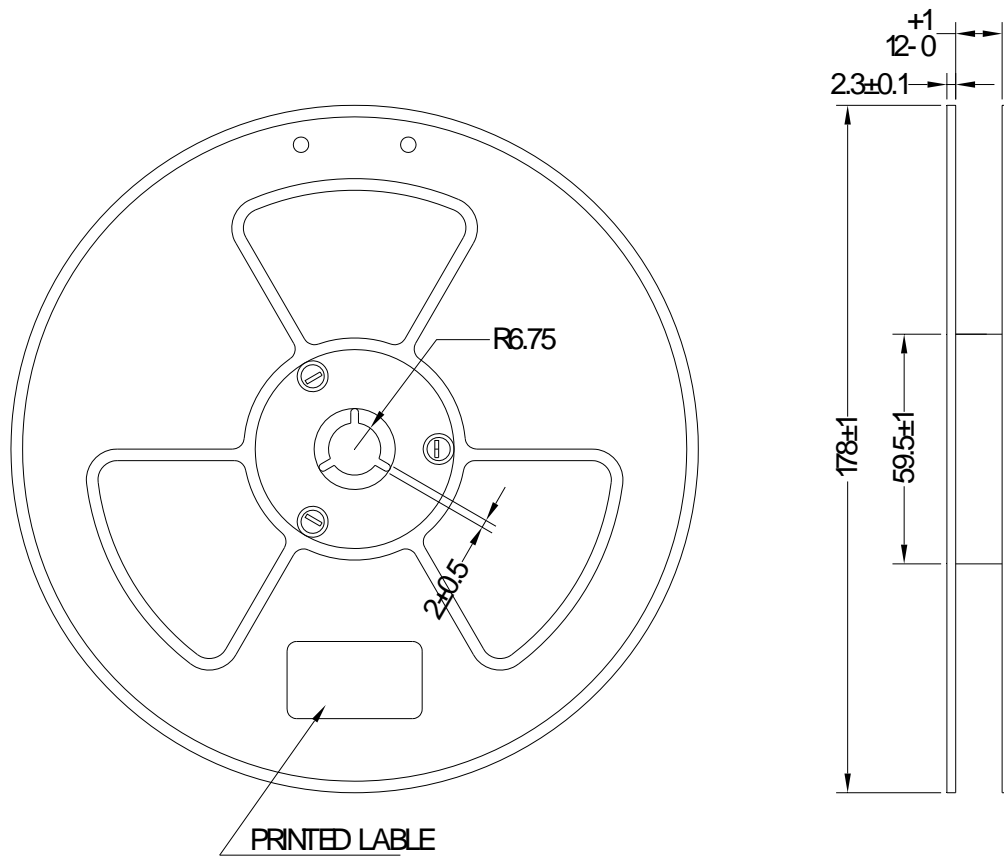
Tape dimension



Tape leader and trailer dimension



Reel dimension



NOTE : Baking is required under the following conditions:
The pack has been opened for more than four weeks.
Baking recommended conditions:
 60 ± 5 °C for 20 hours.