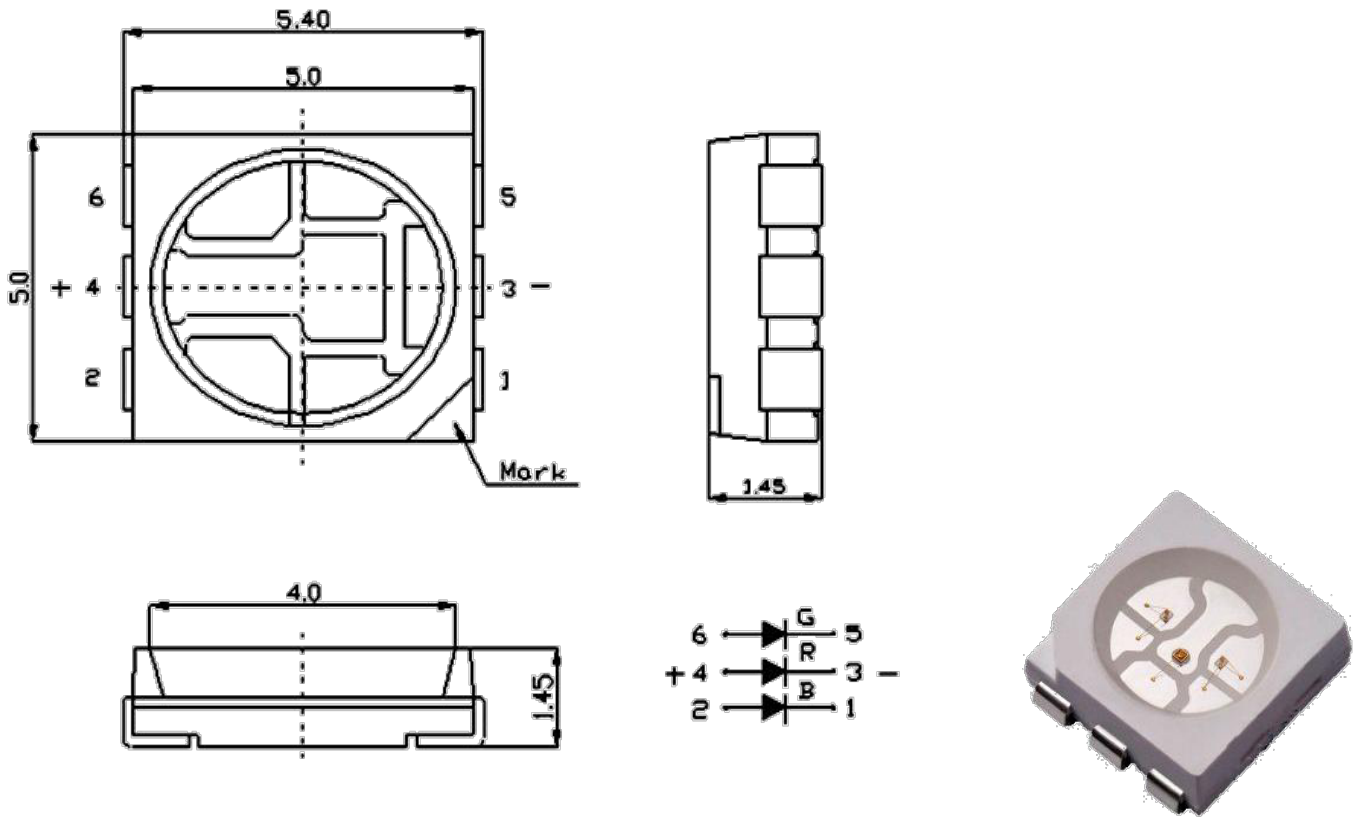


Approve Sheet

Product	LED	
Part Number	IE-5050RGB-SB-D01-Y	
Issue Date		
Customer specification		
Customer		
(mcd)	R:5-8lm G:14-19lm B:2-5lm	
VF (V)	R:2.0-2.4V G:2.6-3.2V B:3.0-3.4V	
CRI		
Remarks		
/Maker		
Prepared	Checked	Customer Confirmation

Package Dimensions:



Notes

- All dimensions are in millimeters (inches).
- Tolerance is $\pm 0.25\text{mm}$ (.010") unless otherwise noted.
- Protruded resin under flange is 1.0mm(.04") max.
- Lead spacing is measured where the leads emerge from the package.
- Specifications are subject to change without notice.

Absolute Maximum Ratings at TA=25°C

Parameter	Valce			Unit
	R	G	B	
Power Dissipation	100	160	160	mW
Pulsed Forward Current (1/10 Duty Cycle, 0.1ms Pulse width)	180			mA
Continuous Forward Current	150			mA
Derating Linear From 50 °C	0.4			mA / °C
Reverse Voltage	5			V
Operation Temperature Range	-30°C to +80°C			
Storage Temperature Range	-40°C to +80°C			
Lead Soldering Temperature [4mm (.157") From Body]	260°C for 5 Seconds			

Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min	Typ.	Max	Unit	Test Condition	
Luminous Intensity	IV	R	5	--	8	lm	IF=50mA
		G	14	--	19		IF=50mA
		B	2	--	5		IF=50mA
Viewing Angle	2 θ 1/2	110	--	120	deg	Note 2	
wave length(λd)	R	620	--	625	nm	IF=50mA	
		625	--	630			
	G	515	--	520		IF=50mA	
		520	--	525			
		525	--	530			
	B	460	--	465		IF=50mA	
465		--	470				
Forward Voltage (R)	R	1.8	--	2.0	V	IF=50mA	
		2.2	--	2.4			
		2.4	--	2.6			
	G	2.6	--	2.8		IF=50mA	
		2.8	--	3.0			
		3.0	--	3.2			
	B	3.0	--	3.2		IF=50mA	
		3.2	--	3.4			

			3.4	--	3.6		
Reverse Current	IR	--	--	--	5	μ A	VR=5V

Notes: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve. $1/2$ is the off-axis angle at which the luminous intensity is half the axial luminous and intensity. The dominant wavelength, λ_d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device. The IV guarantee should be added $\pm 15\%$.

INTENSITY BIN LIMIT (IF=3*50mA)

Red

BinCode	Min(lm)	Max(lm)
A	5	8

Green

Bin Code	Min(lm)	Max(lm)
A	14	19

Blue

BinCode	Min(lm)	Max(lm)
A	2	5

COLOR BIN LIMIT(IF=3*50mA)

Red

BinCode	Min(nm)	Max(nm)
A	620	625
B	625	630

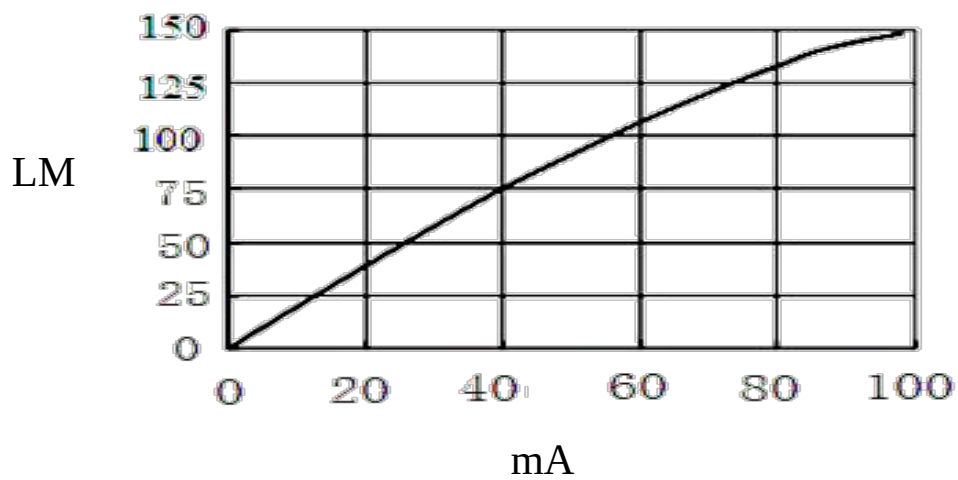
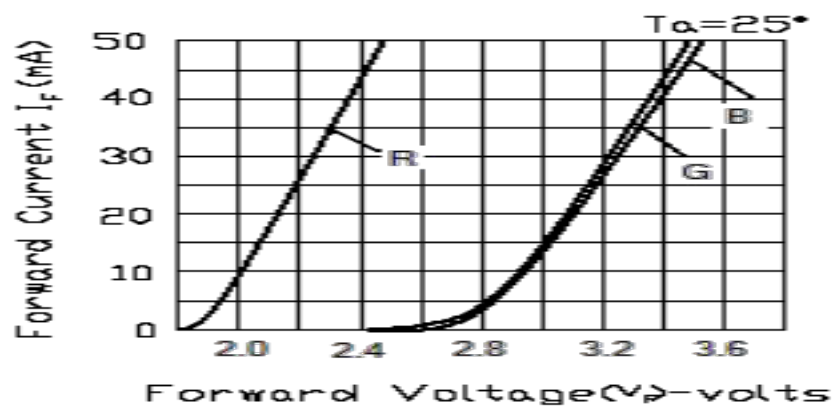
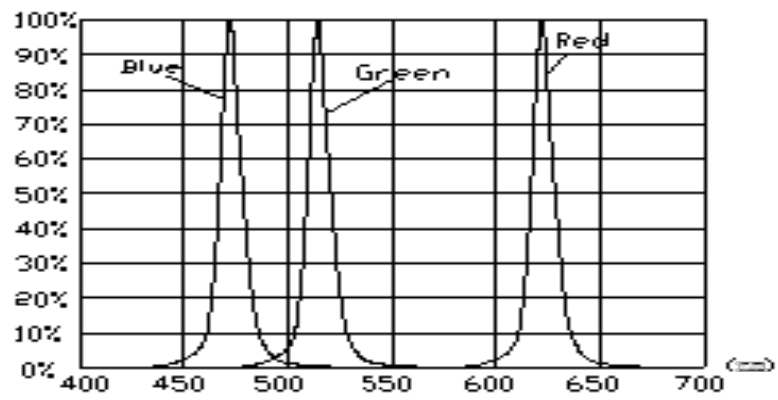
Green

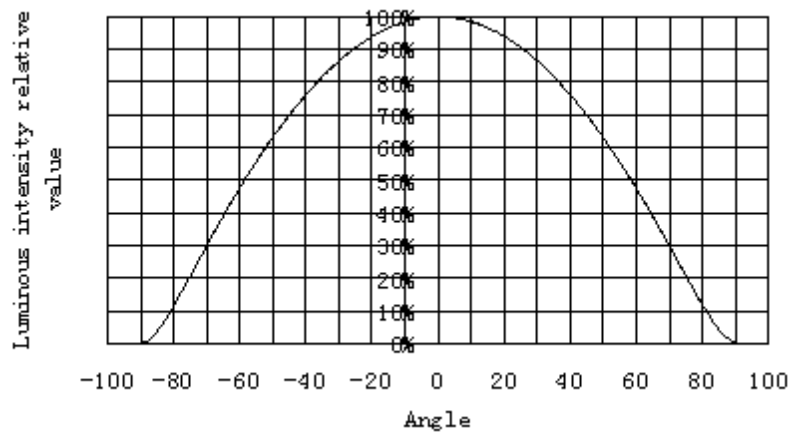
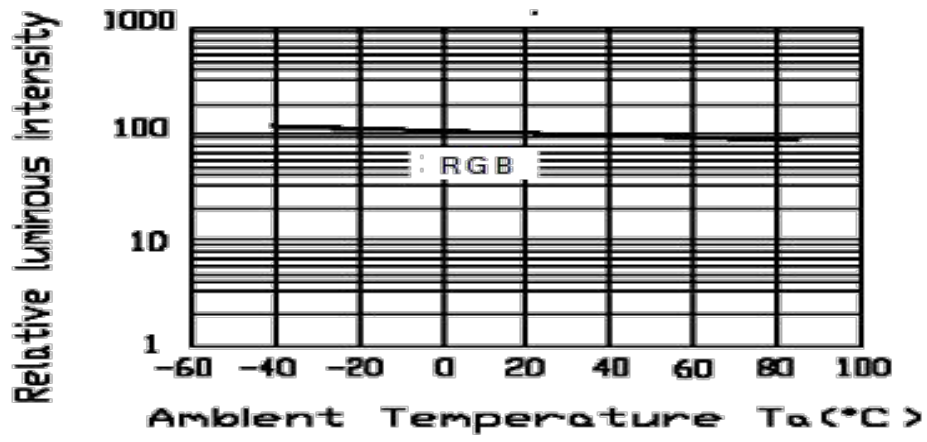
Bin Code	Min(nm)	Max(nm)
A	515	520
B	520	525
C	525	530

Blue

BinCode	Min(nm)	Max(nm)
A	460	465
B	465	470

Optical Characteristics

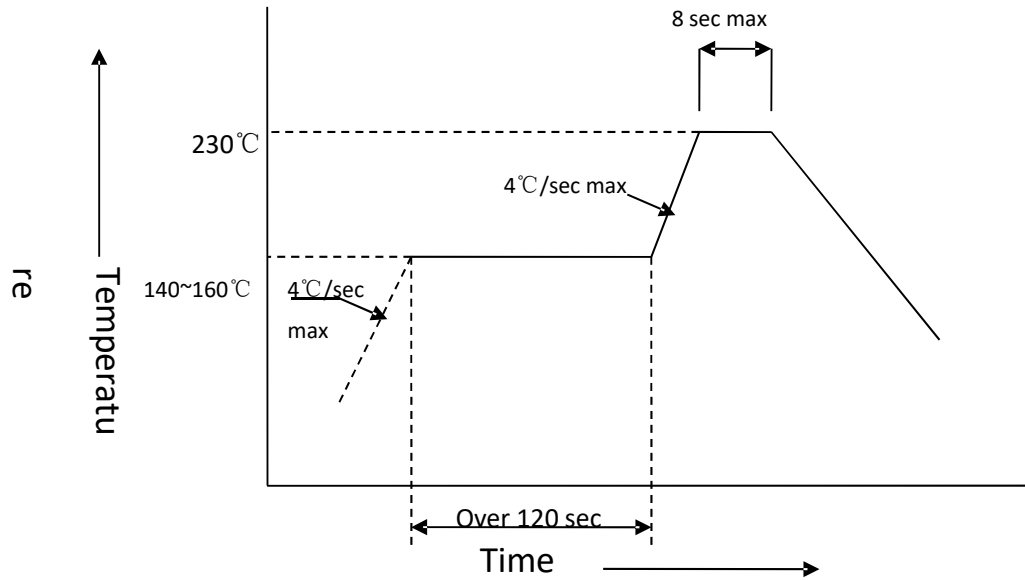




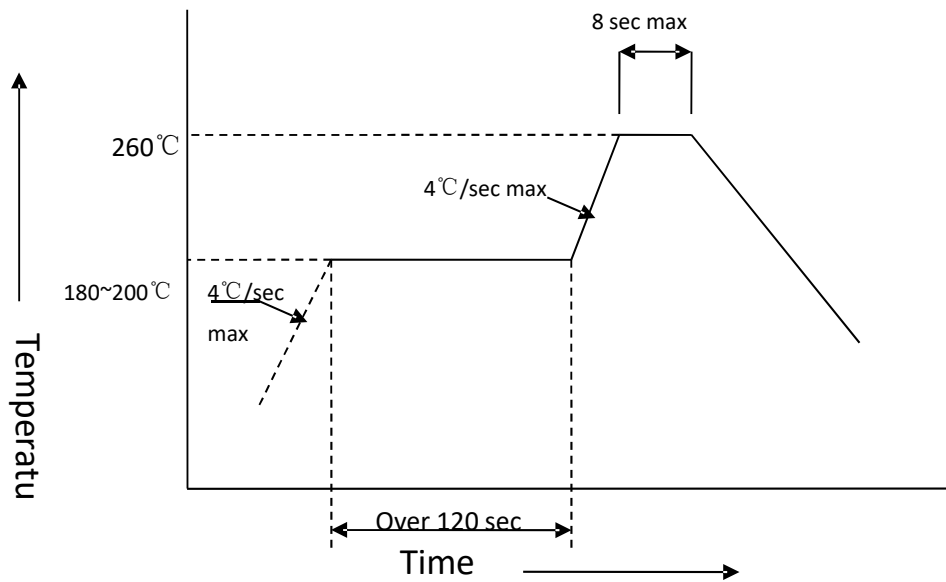
Reflow Soldering Instructions

Number of reflow process shall be less than 1 times and cooling

1>Lead Solder

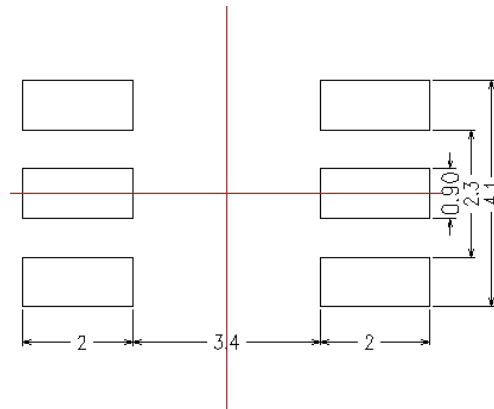


2>Lead-Free Solder



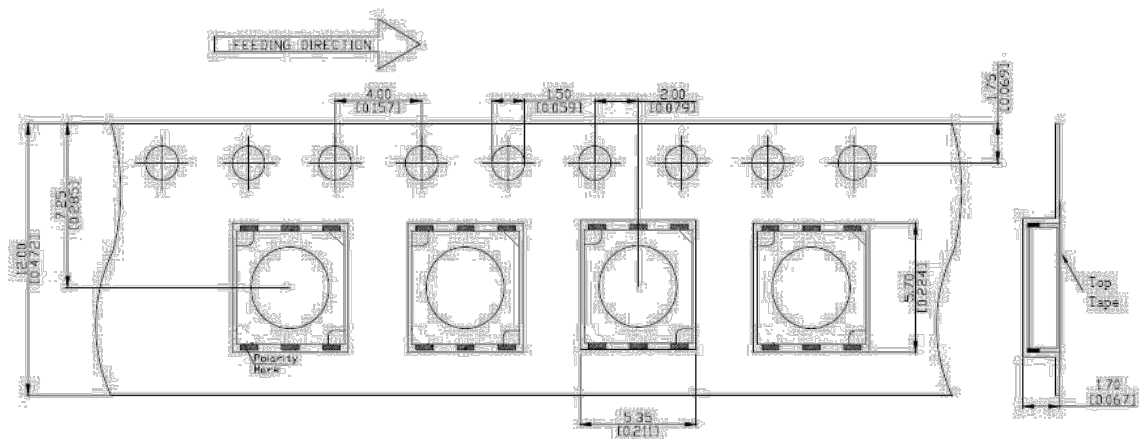
Recommended Soldering Pattern

<Units:mm>



Method of Taping / Polarity and Orientation

Packing unit 1000/reel, $\varnothing 180$ mm



Adhesion Strength of Cover Tape : Adhesion strength to be 0.1 – 0.7N when the cover tape is turned off from the carrier at 10° angle to be the carrier tape.

SMD LED

