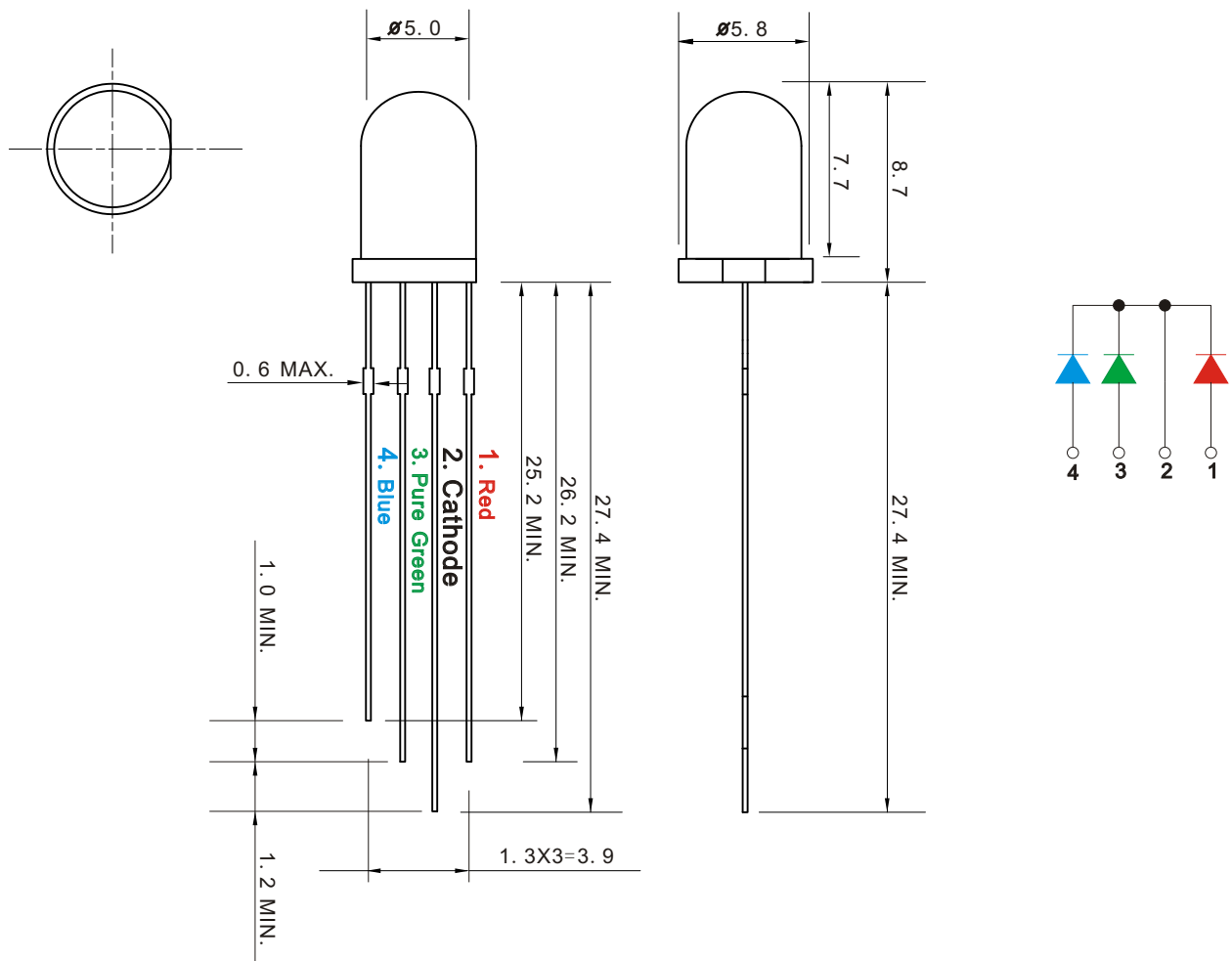


### KTL050RGBWI CC

#### Features

- \* 5.0mm x 8.7mm round LED lamp
- \* Low power requirement
- \* I. C. Compatible
- \* Easy assembly
- \* RoHs compliant
- \* Wide viewing angle
- \* Bicolour version available

Part No.	KTL050RGBWI CC	
Lens	White Diffused	
Chip	Ram Material	InGaAlP/InGaN/InGaN
	Emitted colour	Red/Pure Green/Blue



Absolute Maximum Rating: (TA=25°C)

Parameter	Symbol	Device	Maximum Rating	Unit
Peak Forward Current	IFp	Red	150	mA
		Pure Green	100	
		Blue	100	
Forward Current	IF	Red	20	mA
		Pure Green	20	
		Blue	20	
Power Dissipation	PD	Red	50	mW
		Pure Green	70	
		Blue	72	
Reverse Voltage	VR		5	V
Operating Temperature	Topr		-40~+85	°C
Storage Temperature	Tstg		-40~+85	°C
Electrostatic Discharge	ESD		500	V
Soldering Temperature	260°C for 3 seconds			

Lead soldering Temperature (4mm from body) : 260°C for seconds

Optical-Electrical Characteristic: (TA=25°C)

Parameter	Symbol	Condition	Device	Type	Max.	Unit
Forward Current	VF	IF=20mA	Red	2.0	2.4	V
			Pure Green	3.2	3.6	
			Blue	3.2	3.6	
Reverse Current	IR	VR=5V	Red	-	5	uA
			Pure Green	-	10	
			Blue	-	10	
Dominant Wavelength	λd	IF=20mA	Red	630	-	nm
			Pure Green	522	-	
			Blue	468	-	
Peak Wavelength	λp	IF=20mA	Red	625	-	nm
			Pure Green	525	-	
			Blue	470	-	
Spectral Line Half-width	Δλ1/2	IF=20mA	Red	25	-	nm
			Pure Green	35	-	
			Blue	21	-	
Luminous Intensity	Iv	IF=20mA	Red	500	1000	mcd
			Pure Green	2000	3000	
			Blue	500	1000	
Viewing Angle	2θ1/2	IF=20mA	Red	60		Deg
			Pure Green	60		
			Blue	60		

Fig. 1

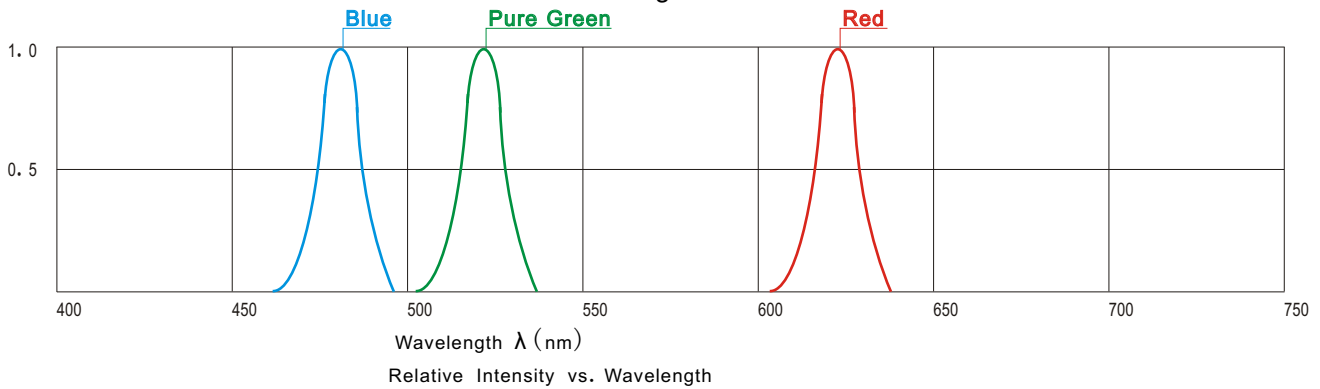


Fig. 2

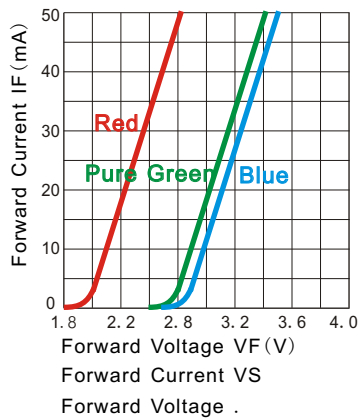


Fig. 3

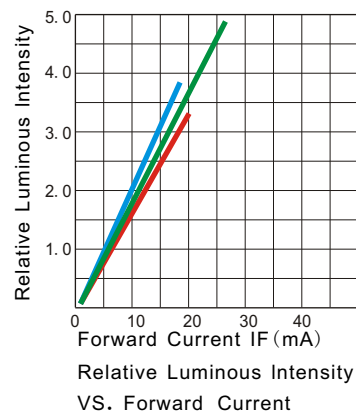


Fig. 4

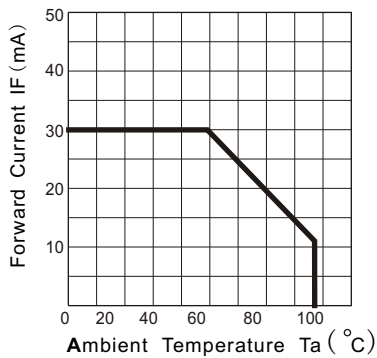


Fig. 5

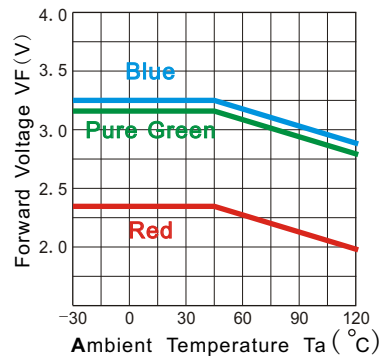
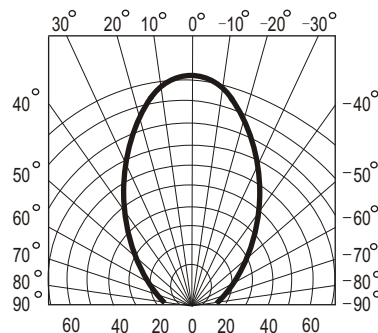
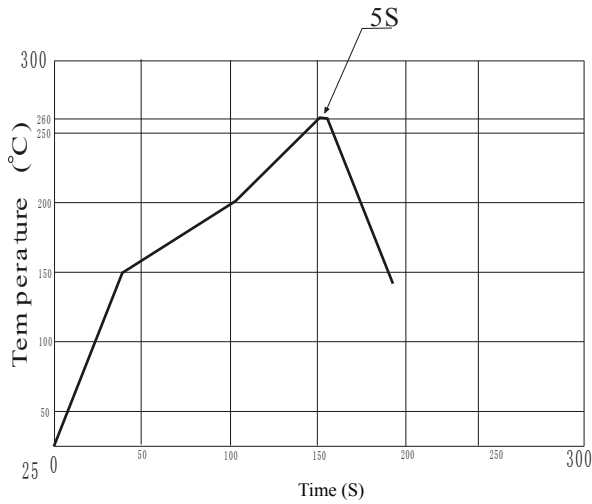


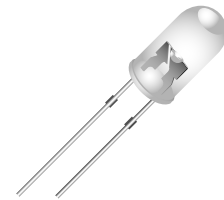
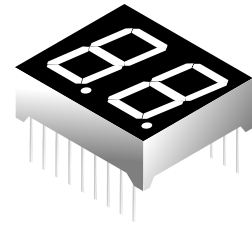
Fig. 6



### Wave Soldering for Lead-Free Through-hole LED

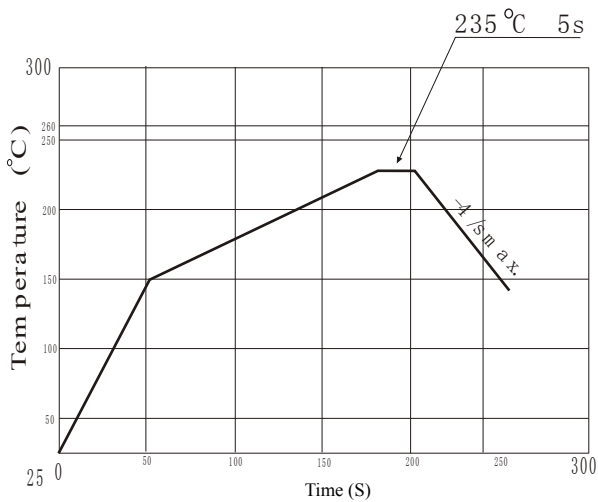


Solder Temperature	260°C for 5 Seconds
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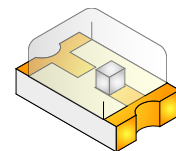
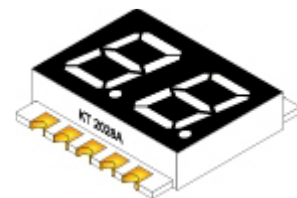


1.5mm below package base

### Lead-free SMT process



Lead solder Temperature	235°C for 5 Seconds
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Notes: Recommend the wave temperature max. 235°C.  
 Do not apply stress on the epoxy when temperature over 80°C.  
 No more than once.