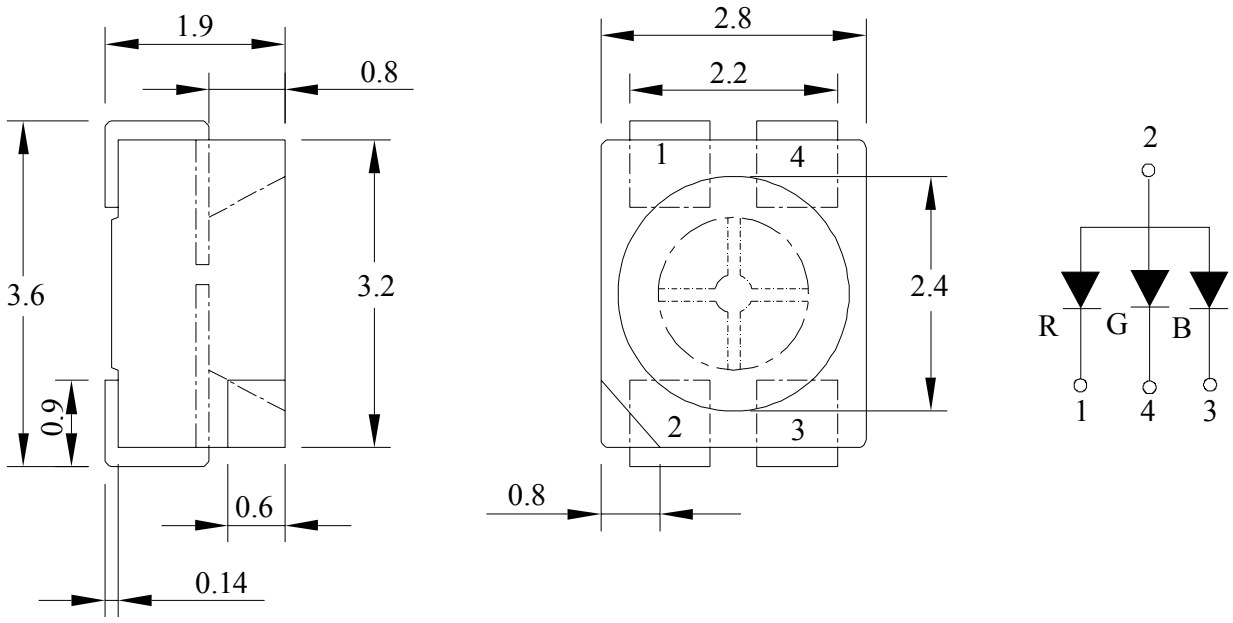
Package Dimensions



Notes:

1. All dimensions are in mm.
2. Tolerance is ±0.25mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
T3S34RGBC-L	AlGaInP/Sapphire	Hyper Red	Water Clear
	InGaN/Sapphire	True Green	
	InGaN/Sapphire	Blue	

Absolute Maximum Ratings at Ta=25 ℃

Parameter	Symbol	Rating			Unit
		R	G	B	
Power Dissipation	PD	75	108	108	mW
Reverse Voltage	VR	5			V
D.C. Forward Current	If	30			mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	If(Peak)	100			mA
Operating Temperature Range	Topr.	-40 to +100			℃
Storage Temperature Range	Tstg.	-40 to +100			℃
Soldering Temperature	Tsld.	Reflow Soldering: 260℃ for 10 sec. Hand Soldering: 350℃ for 3 sec.			
Electric Static Discharge Threshold (HBM)	ESD	300			V

Electrical and Optical Characteristics:

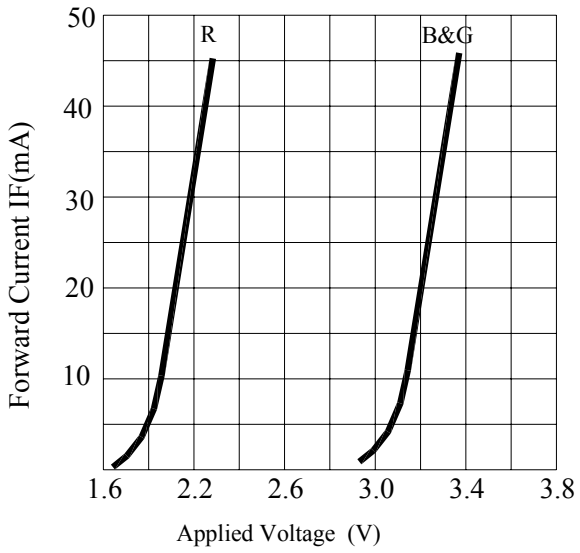
Parameter	Symbol	Color	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	IV	R	If=20mA	370	680		mcd
		G		700	1200		
		B		150	290		
Forward Voltage	Vf	R	If=20mA		2.1	2.5	V
		G&B			3.2	3.6	
Peak Wavelength	λp	R	If=20mA		632		nm
		G&B			---		
Dominant Wavelength	λd	R	If=20mA		625		nm
		G			525		
		B			465		
Reverse Current	Ir	R	Vr=5v			100	μA
		G&B				50	
Viewing Angle	2θ1/2		If=20mA		120		deg
Spectrum Line Halfwidth	Δλ	R	If=20mA		20		nm
		G			35		
		B			26		

Notes: 1.The datas tested by IS tester.

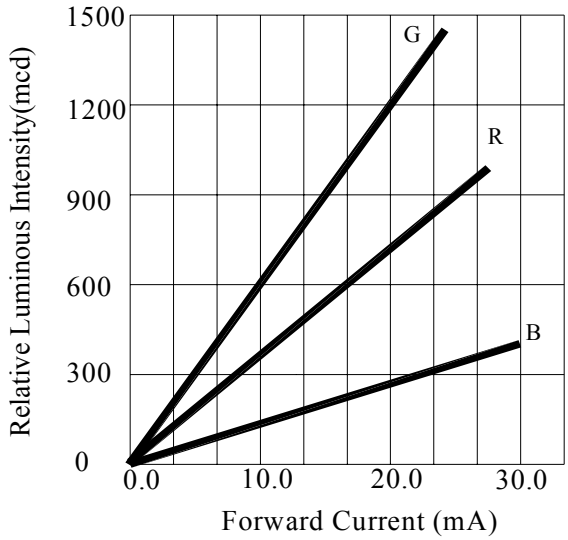
2. Customer's special requirements are also welcome.

Typical Electrical/Optical Characteristic Curves

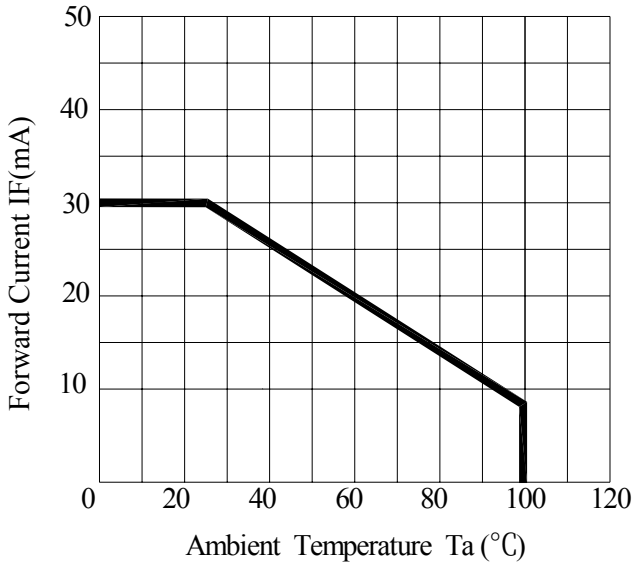
(25℃ Ambient Temperature Unless Otherwise Noted)



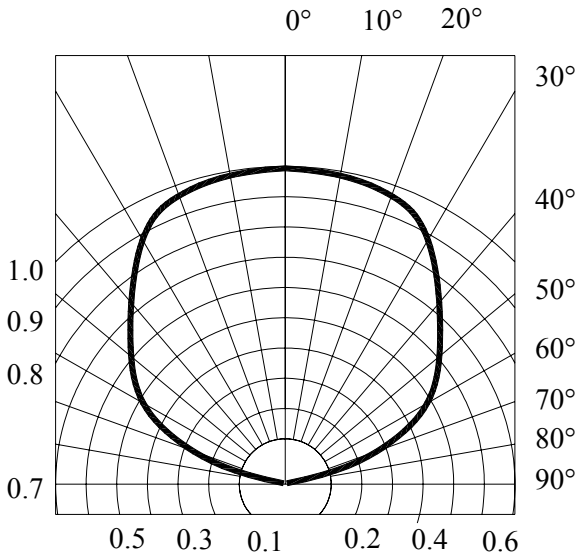
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Intensity



Ambient Temperature VS. Forward Current



Radiation Diagram

PRECAUTION IN USE

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 sealed container with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again.

Fold the opened bag firmly and keep in dry environment.

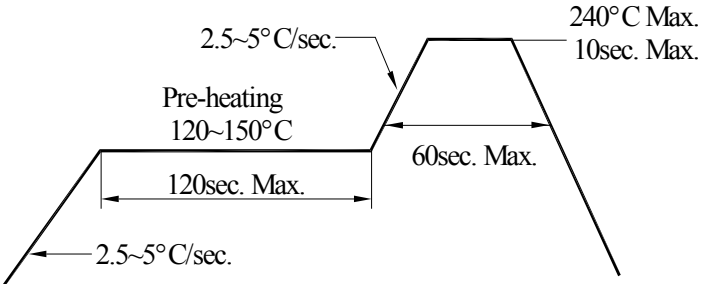
Soldering

Reflow Soldering			Hand Soldering	
	Lead Solder	Lead – free Solder		
Pre-heat	120~150℃	180~200℃	Temperature	350℃ Max.
Pre-heat time	120sec. Max.	120sec. Max.	Soldering time	3sec. Max. (one time only)
Peak temperature	240℃ Max.	260℃ Max.		
Soldering time	10sec. Max.	10sec. Max.		
Condition	refer to Temperature-profile 1	refer to Temperature-profile 2		

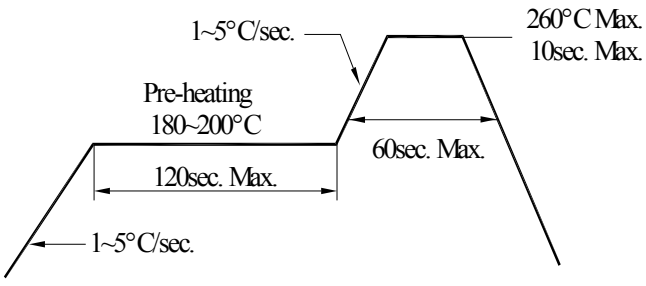
***After reflow soldering rapid cooling should be avoided.**

[Temperature-profile (Surface of circuit board)]
Use the conditions shown to the under figure.

＜1 : Lead Solder＞

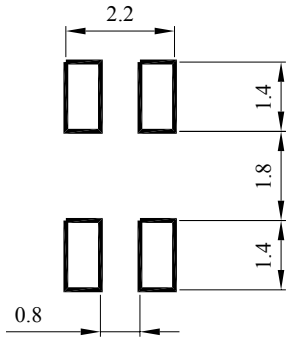


＜2 : Lead-free Solder＞



[Recommended soldering pad design]

Use the following conditions shown in the figure.



(UNIT:mm)