

# TOL-5043ACC

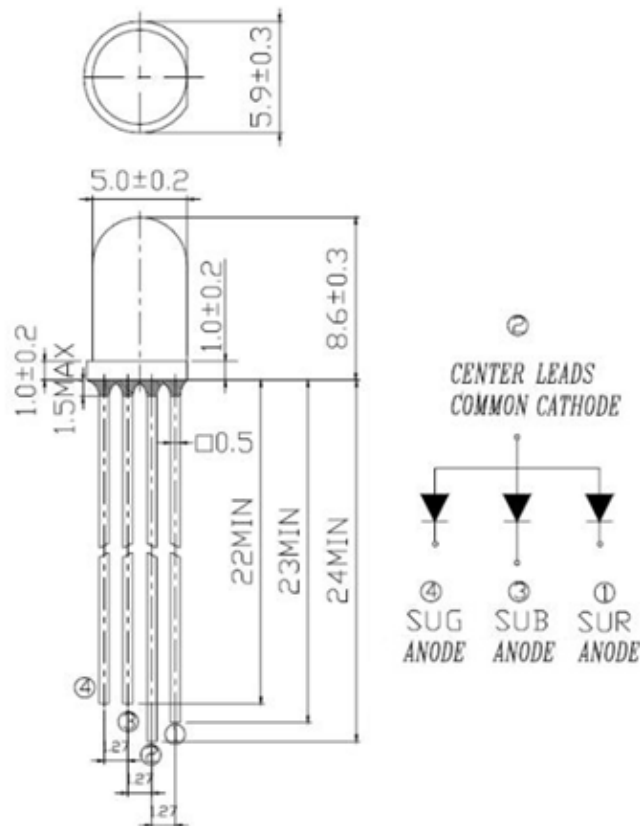
## Lamp LED

Part Number	Chip		Lens Color
	Material	Source Color	
TOL-5043ACC	AlGaInP/InGaN/InGaN	Red/Green/Blue	Water Clear

### Features

- I.C. compatible.
- Low power consumption, long life, stable and reliable.
- Compatible with wave soldering process.
- Red/Green/Blue common Cathode.
- RoHS compliant.

### Dimensions



#### Notes:

1. All dimensions are in millimeter.
2. Tolerance is  $\pm 0.25$ mm unless otherwise noted.

## Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating			Unit
	R	G	B	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	100	160	mA
Power Dissipation	100	100	120	mW
Continuous Forward Current	30	30	30	mA
Reverse Voltage	5	5	5	V
Operating Temperature Range	-30°C to +85°C			
Storage Temperature Range	-40°C to +100°C			
Wave Soldering Profile For Lead-free Soldering	260°C, 5 Seconds			

## Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Red			Green			Blue			Unit	Test Condition
		Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.		
Luminous Intensity	I <sub>v</sub>	1000	2000	-	7000	8000	-	1000	2000	-	mcd	I <sub>F</sub> =20mA
Viewing Angle	2θ <sub>1/2</sub>	-	40	-	-	40	-	-	40	-	deg	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	620	-	630	520	-	530	464	-	474	nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	1.9	-	2.4	2.9	-	3.4	2.9	-	3.5	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	-	-	10	-	-	10	-	-	10	μA	V <sub>R</sub> =5V

\* Please refer to CIE 1931 chromaticity diagram.

Remark : Only reference for above data when testing.

The tolerance of intensity : ± 15%.

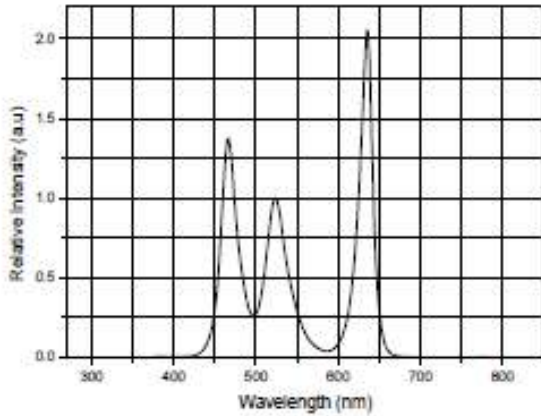
The tolerance of wave length : ±1nm.

The tolerance of forwards voltage : ± 0.05V.

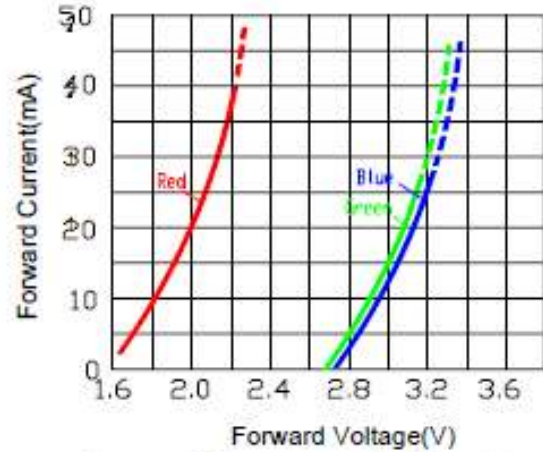
## Typical Characteristics Curves

### Typical Electro-Optical Characteristics Curves

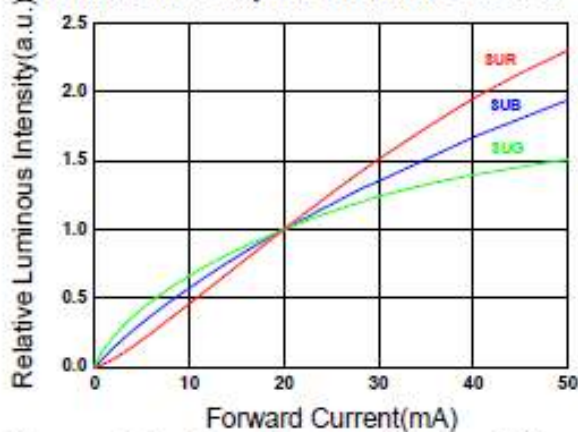
Relative Intensity vs. Wavelength



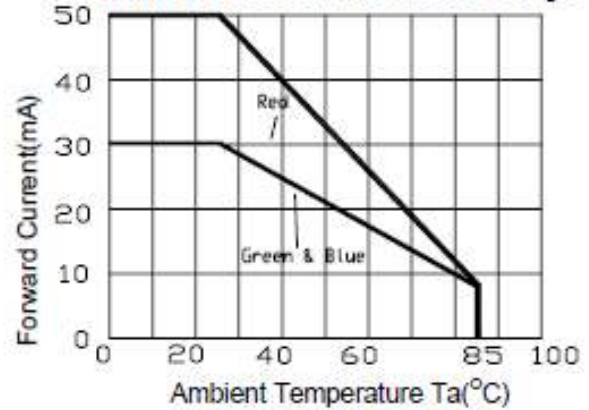
Forward Current vs. Forward Voltage



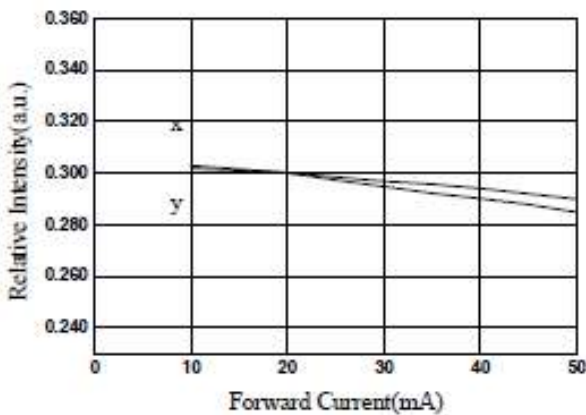
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temp.



Chromaticity Coordinate vs. Forward Current



Relative Intensity vs. Angle Displacement

