

Features

- Quad-level design, save board space.
- Different color combination available.
- Black case enhances contrast.
- Housing UL rating: 97V-0
- Housing material: type 66 nylon
- RoHS compliant

Description

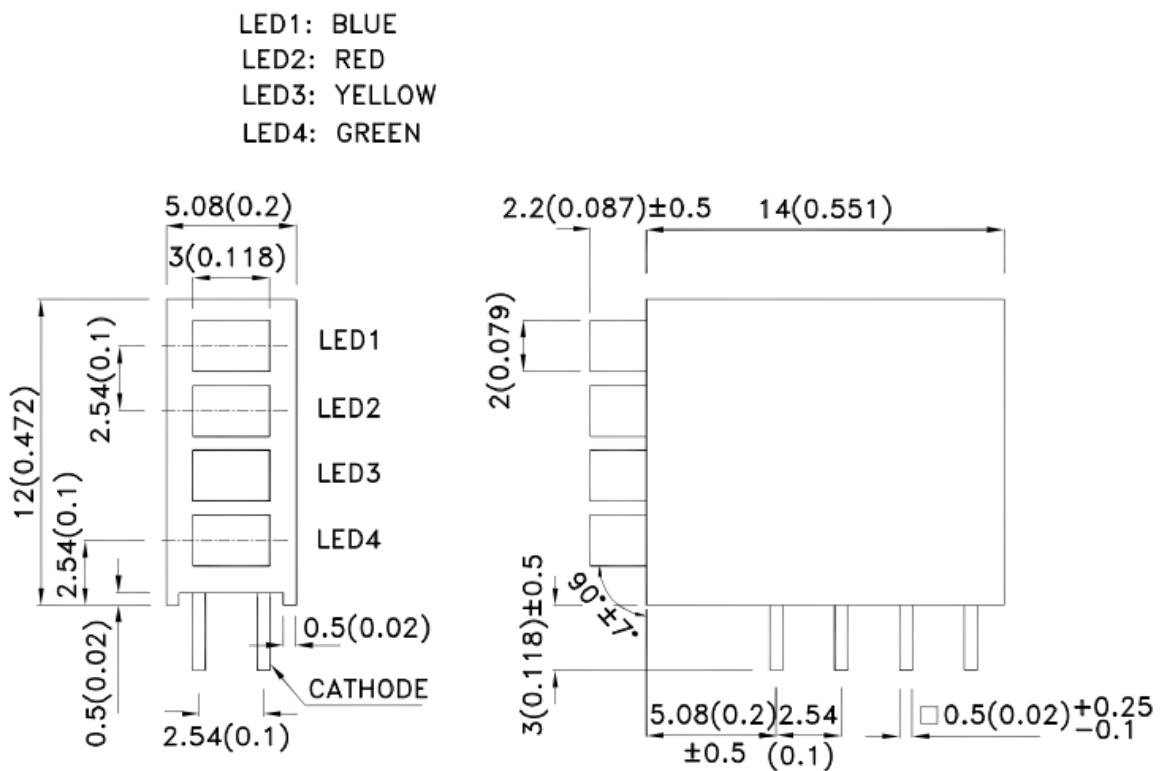
The Blue source color devices are made with InGaN on SiC Light Emitting Diode.

The Red source color devices are made with Al-GaN on GaAs substrate Light Emitting Diode.

The Yellow device is made with AlGaInP on GaAs substrate Light Emitting Diode chip.

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

All dimensions are in millimeters (inches).

Tolerance is ±0.25(0.01") unless otherwise noted.

Lead spacing is measured where the leads emerge from the package.

The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Selection Guide

Part No.	Dice	Lens Type	IV (mcd) [2] @20mA		Viewing Angle [1] 2θ1/2
			Min.	Typ.	
SE-23-44B/R/Y/G-SD	Blue (InGaN)	Blue Diffused	30 *30	80 *80	100°
	Red (AlGaInP)	Red Diffused	70 30*	160 *70	100°
	Yellow (AlGaInP)	Yellow Diffused	70 *70	130 *130	100°
	Green (AlGaInP)	Green Diffused	15 *15	35 *35	100°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.
- * Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Condition
λ_{peak}	Peak Wavelength	Blue	468			IF=20mA
		Red	645	--	nm	
		Yellow	590			
		Green	574			
λ_D [1]	Dominant Wavelength	Blue	465			IF=20mA
		Red	630	--	nm	
		Yellow	590			
		Green	570			
Δλ_{1/2}	Spectral Line Half-width	Bleu	21			IF=20mA
		Red	27	--	nm	
		Yellow	28			
		Green	20			
C	Capacitance	Blue	100			VF=0V;f=1Mhz
		Red	45	--	pF	
		Yellow	25			
		Green	15			
VF [2]	Forward Voltage	Blue	3.2	4.0		IF=20mA
		Red	1.9	2.5	V	
		Yellow	2.0	2.5		
		Green	2.1	2.5		
IR	Reverse Current	Blue				VR=5V
		Red	--	10	uA	
		Yellow				
		Green				

Notes:

1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.



Absolute Maximum Ratings at Ta=25°C

Parameter	Blue	Red	Yellow	Green	Units
Power Dissipation	120	75	75	75	mW
DC Forward Current	30	30	30	30	mA
Peak Forward Current [1]	100	185	150	150	mA
Reverse Voltage	5				V
Operating/Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	260°C For 3 Seconds				
Lead Solder Temperature [3]	260°C For 5 Seconds				

Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

