

3mm (T1) Package Discrete LED RED/GREEN, Bi-Color

B-C-LED-3MM-CC

- ◆ Industry Standard 3mm (T1) Package
- ◆ RoHS Compliant
- ◆ White Diffused Lens
- ◆ Available in Flange (F) Style
- ◆ 3-Lead Bi-Color LED
- ◆ Ideal for Status Indication and Display



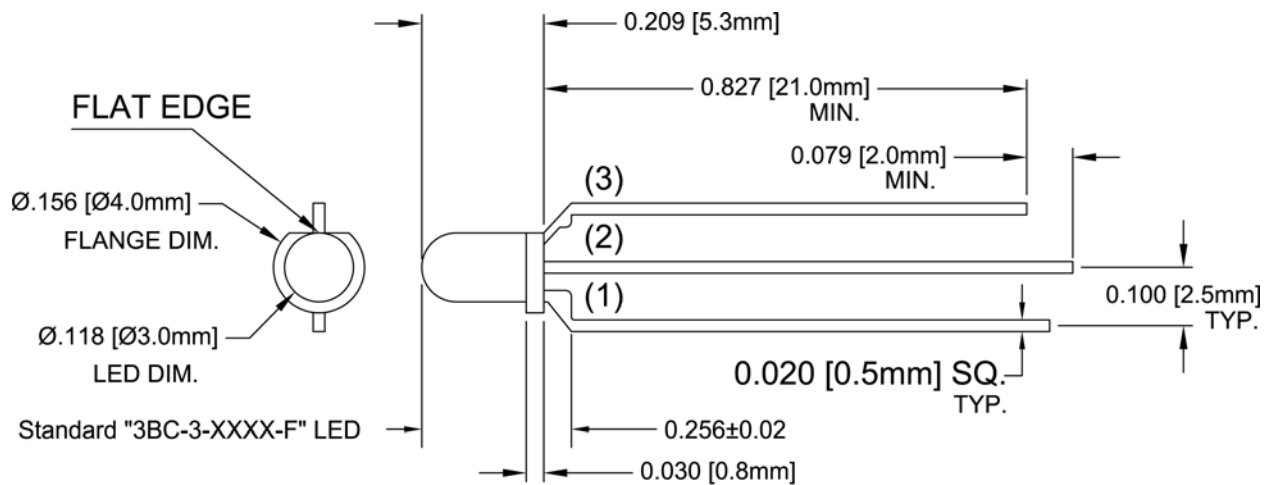
3mm T1 Package 3-Lead Bi-Color is ideal for those applications where multiple signals need to be displayed at the same location such as standby-on indication for server or computer peripherals. When needed, the 3rd color signal could be created by powering up both chips together for on-off-standby applications that require three distinct signals. It offers white diffused LED lens for uniform light output. The Flange LED is ideal for Panel Mount Clip & Ring assemblies. This 3-Lead Bi-color LED package comes in a common cathode Lead Frame configuration.

Part Number	Material	Emitted Color	Peak. Wavelength λ_p (nm) TYP.	Lens Appearance	Viewing Angle
B-C-LED-3MM-CC	GaAsP/GaP	RED	625nm	White Diffused	40°
	GaP/GaP	GREEN	568nm		

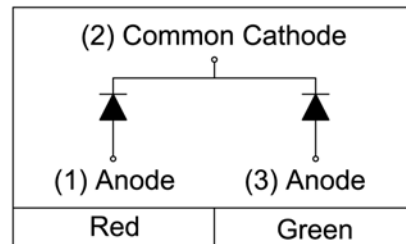


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Outline Dimensions



Recommended Mounting
Hole Size = $\text{Ø}0.032^{+0.003}_{-0.002}$



Outline Drawings Notes:

1. All dimensions are in inches [millimeters].
2. Standard tolerance: $\pm 0.010''$ unless otherwise noted.
3. Tolerance of overall epoxy outline: $\pm 0.020''$ unless otherwise noted.
4. Epoxy meniscus may extend to 0.060" max.

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Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$ unless otherwise noted

Power Dissipation	80 mW
Forward Current (DC)	30 mA
Peak Forward Current ¹	150 mA
Operating Temperature Range	-25 ~ +85°C
Storage Temperature Range	-30 ~ +100°C
Lead Soldering Temperature (3 mm from the base of the epoxy bulb) ²	260°C

Notes: 1. 10% Duty Cycle, Pulse Width \leq 0.1 msec. 2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

$T_A = 25^\circ\text{C}$ & $I_F = 20\text{ mA}$ unless otherwise noted

Part Number	Emitted Color	Forward Voltage (V) ¹			Recommend Forward Current (mA)			Reverse Current (μA)	Dominant Wavelength (nm) ²			Luminous Intensity I_v (mcd)			Viewing Angle $2\theta_{1/2}$ (deg)
		MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
3BC-3-F	Red	/	2.0	2.8	/	20	/	100	/	/	/	/	30	/	40
	Green	/	2.1	2.8					/	/	/	/	30	/	

Notes: 1. Tolerance of forward voltage : $\pm 0.05\text{V}$. 2. Tolerance of dominant wavelength : $\pm 1.0\text{nm}$.

3mm (T1) Package Discrete LED RED/GREEN, Bi-Color

Typical Electrical / Optical Characteristics - Red

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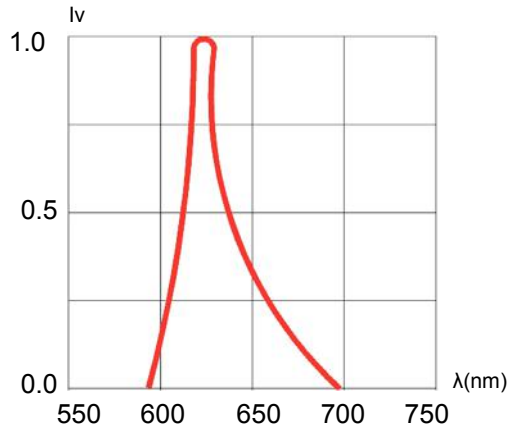


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

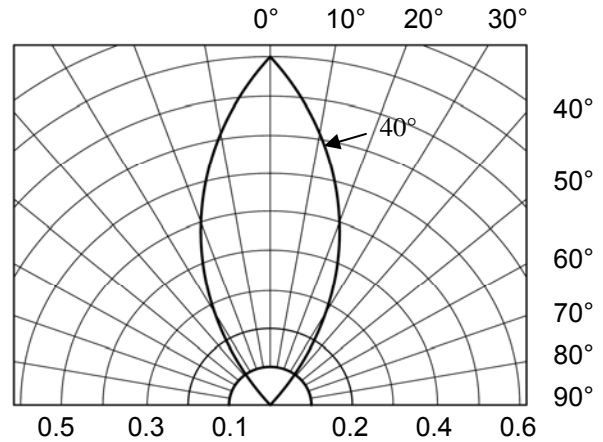


Fig. 2 Directivity Radiation Diagram

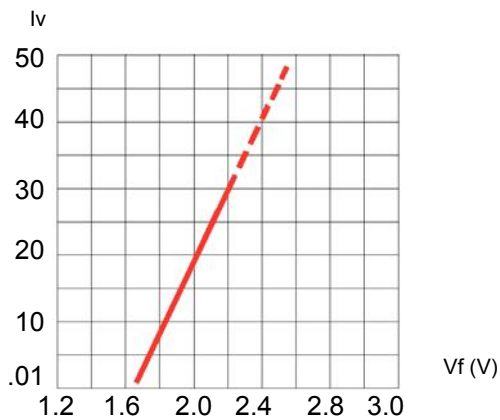


Fig. 3 Relative Intensity (10mA) vs. Forward Voltage

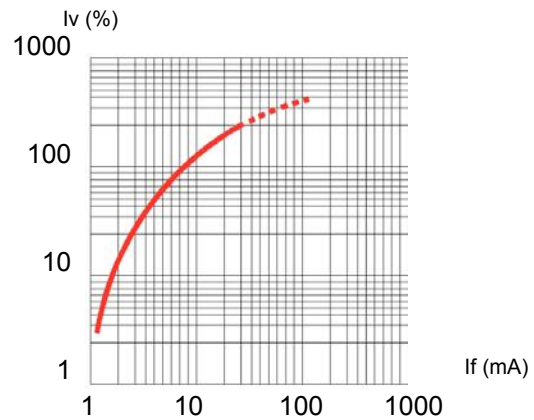


Fig. 4 Relative Luminous Intensity (%) vs. Forward Current

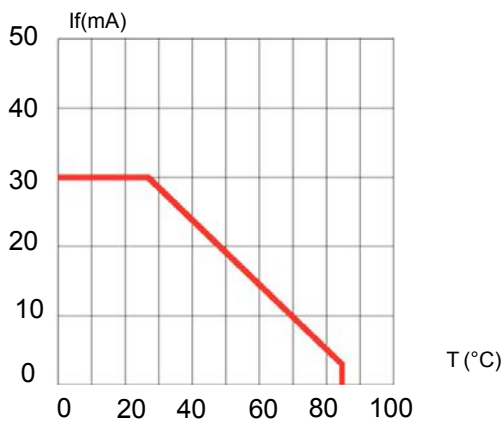


Fig. 5 Forward Current vs. Temperature

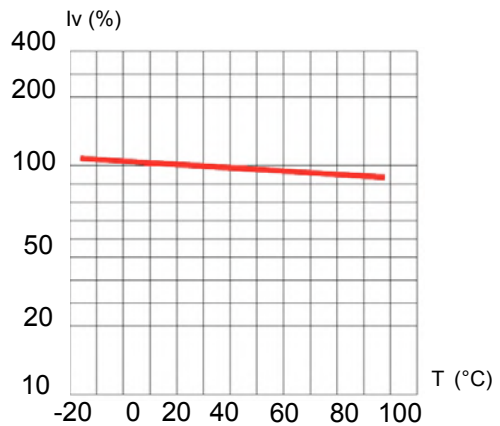


Fig. 6 Relative Intensity (%) vs. Temperature @ 20 mA

3mm (T1) Package Discrete LED RED/GREEN, Bi-Color

Typical Electrical / Optical Characteristics - Green

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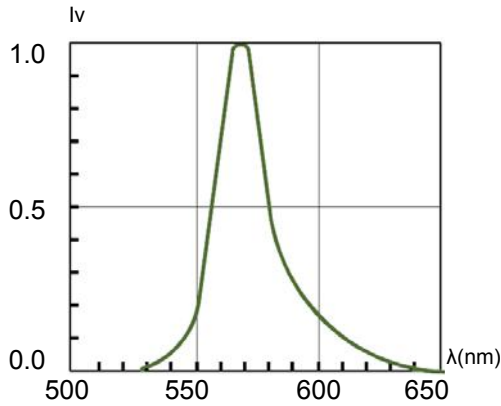


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

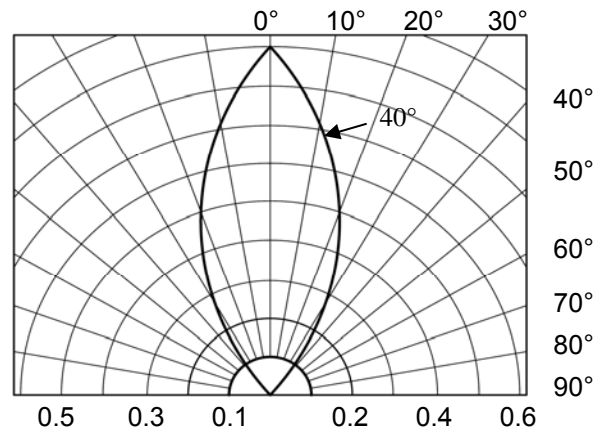


Fig. 2 Directivity Radiation Diagram

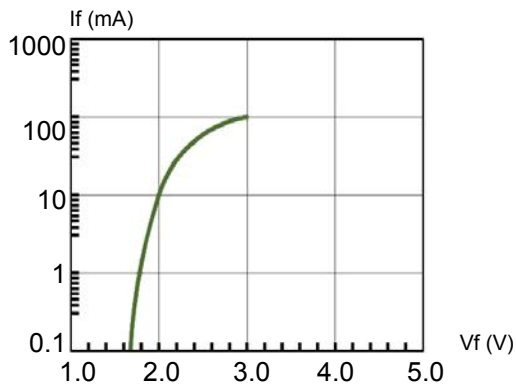


Fig. 3 Forward Current vs. Forward Voltage

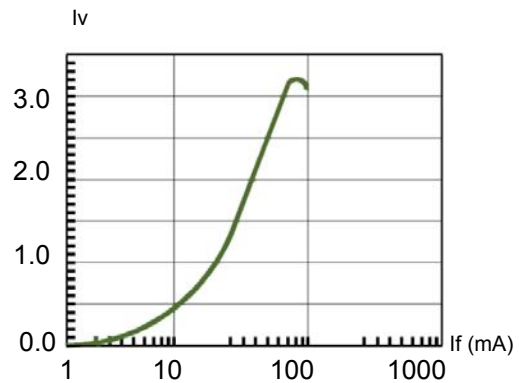


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

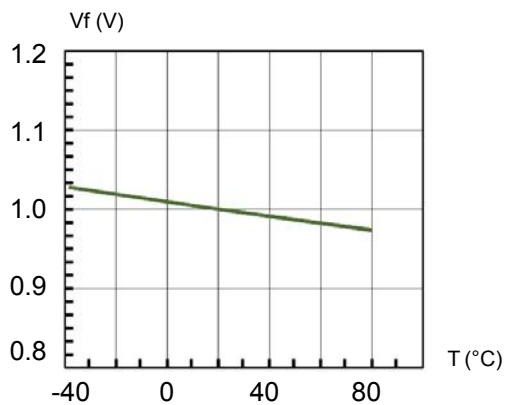


Fig. 5 Forward Voltage vs. Temperature

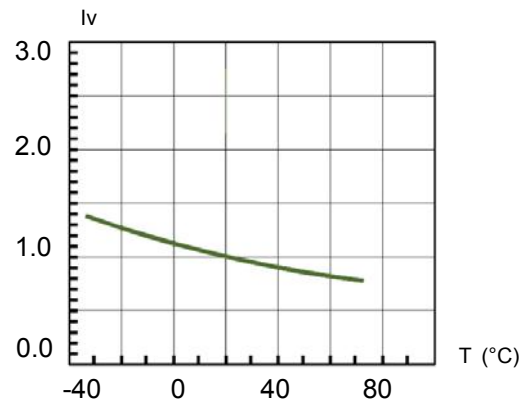
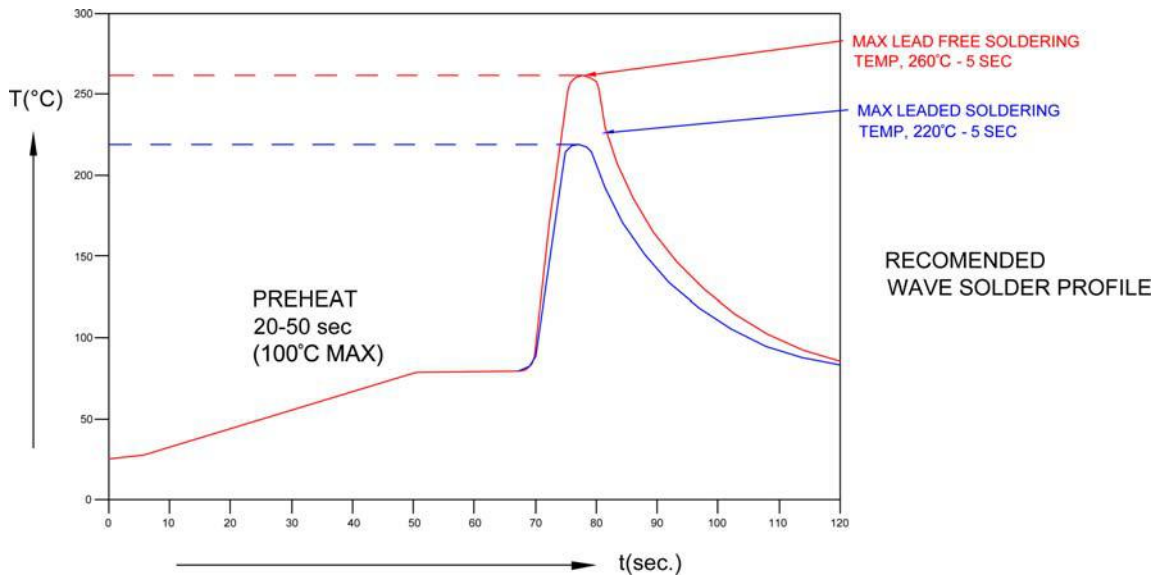


Fig. 6 Relative Luminous Intensity vs. Temperature

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Recommended Soldering Conditions



Recommended Lead Free Wave Soldering Profile

Preheat Temperature: 100°C Max.

Peak Temperature: 260°C Max.

Preheat Time: 20 ~ 50 Seconds

Solder Time Above 217°C: 5 Seconds Max.

Note: Turn off top heater at preheat to prevent the lamp body directly exposed to the heat source.