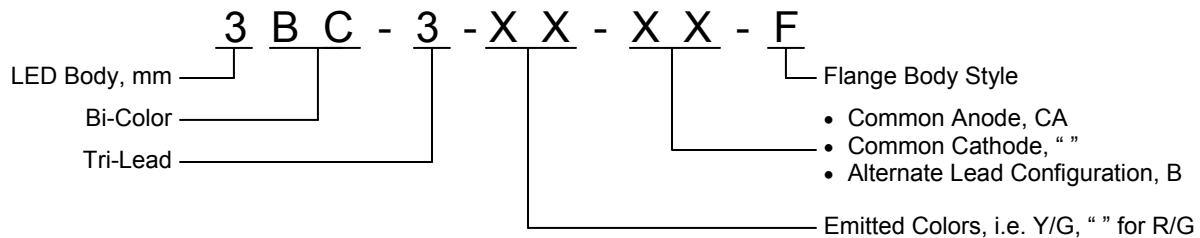## 3BC-3-CA-F

- ♦ **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**

Bivar 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-standy applications that require three distinct signals. Bivar 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 anode Lead Frame configuration.

Part Number	Material	Emitted Color	Peak. Wavelength λp(nm) TYP.	Lens Appearance	Viewing Angle
3BC-3-CA-F	GaAsP/Gap	RED	625nm	White Diffused	45°
	Gap/Gap	GREEN	568nm		

Part Number Designation

3 B C - 3 - X X - X X - F

- LED Body, mm
- Bi-Color
- Tri-Lead
- Flange Body Style
- Common Anode, CA
- Common Cathode, " "
- Alternate Lead Configuration, B
- Emitted Colors, i.e. Y/G, " " for R/G

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

RoHS Compliant

Moisture Sensitivity Levels 1

Bivar, Inc. — 4 Thomas, Irvine, California 92618, U.S.A.
Phone: (949) 951-8808 Fax: (949) 951-3974 E-mail: bivar@bivar.com Web: www.bivar.com

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Outline Dimensions

FLAT EDGE

Ø.156 [Ø4.0mm]
FLANGE DIM.

Ø.118 [Ø3.0mm]
LED DIM.

Standard "3BC-3-XXXX-F" LED

0.209 [5.3mm]

0.827 [21.0mm]
MIN.

0.079 [2.0mm]
MIN.

(3)

(2)

(1)

0.100 [2.5mm]
TYP.

0.020 [0.5mm] SQ.
TYP.

0.256±0.02

0.030 [0.8mm]
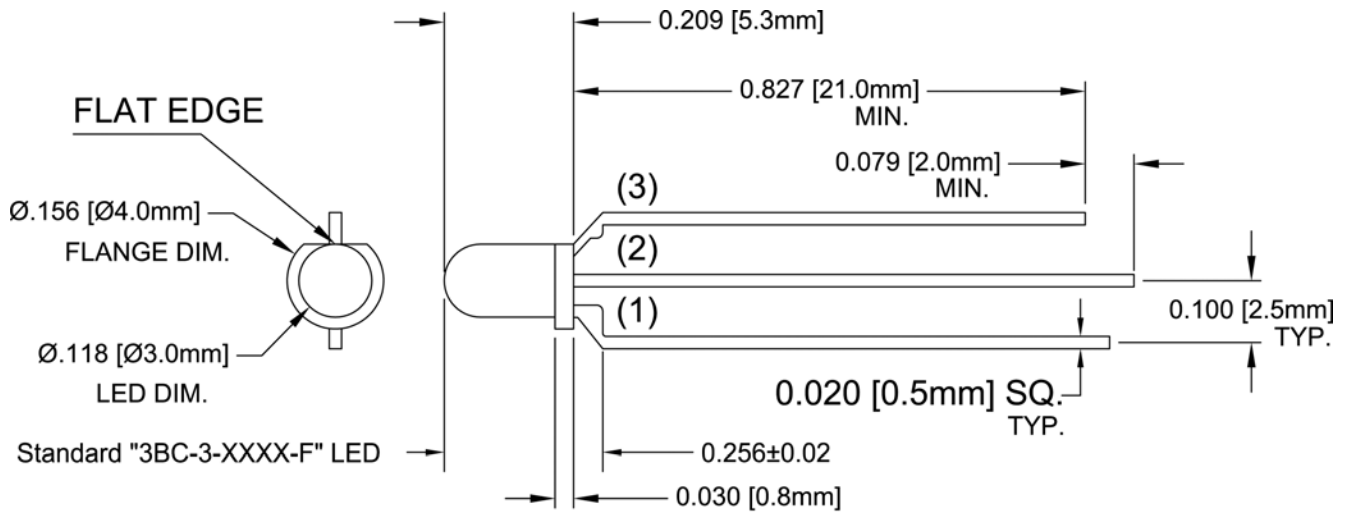
Recommended Mounting
Hole Size = Ø.032 +.003 / -.002

(2) Common Anode

(1) Cathode | (3) Cathode
Red | Green
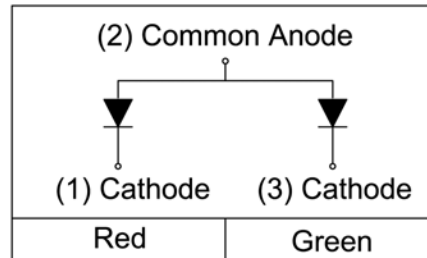
Outline Drawings Notes:
1. All dimensions are in inches [millimeters].
2. Standard tolerance: ±0.010" unless otherwise noted.
3. Tolerance of overall epoxy outline: ±0.020" unless otherwise noted.
4. Epoxy meniscus may extend to 0.060" max.

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Absolute Maximum Ratings

T_A = 25°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 ≤ 0.1 msec.   2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics

T_A = 25°C & I_F = 20 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 Iv (mcd)			Viewing Angle 2 Θ ½ (deg)
		MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
3BC-3-CA-F	Red	/	2.0	2.8	/	20	/	100	/	/	/	/	6	/	45
	Green	/	2.1	2.8					/	/	/	/	6	/	

Notes: 1. Tolerance of forward voltage : ±0.05V.   2. Tolerance of dominant wavelength : ±1.0nm.

Bivar, Inc. — 4 Thomas, Irvine, California 92618, U.S.A.
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Typical Electrical / Optical Characteristics - Red

$T_A = 25°C$ unless otherwise noted

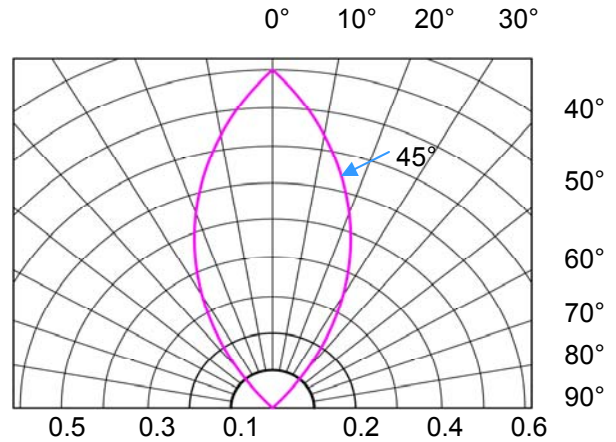Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA
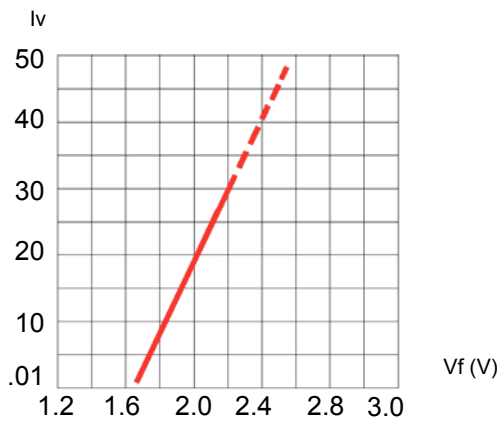
Fig. 2 Directivity Radiation Diagram

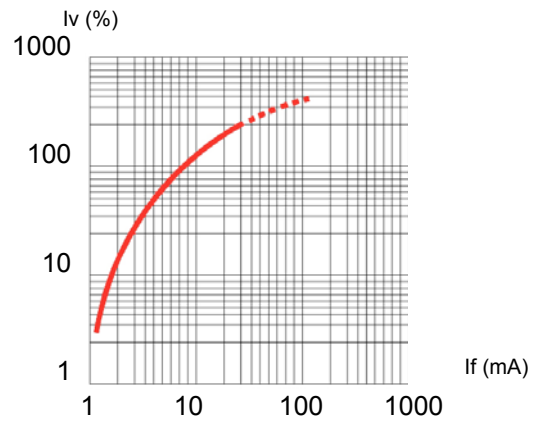Fig. 3 Relative Intensity (10mA) vs. Forward Voltage

Fig. 4 Relative Luminous Intensity (%) vs. Forward Current
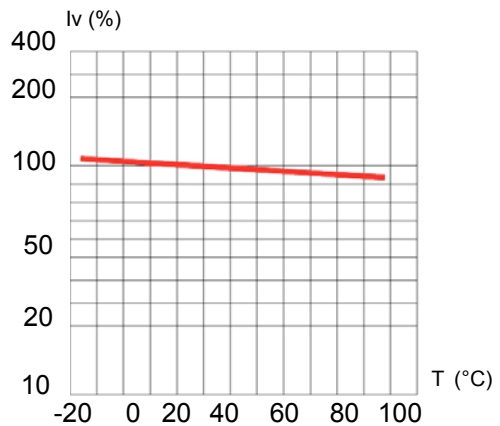
Fig. 5 Forward Current vs. Temperature

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

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Typical Electrical / Optical Characteristics - Green
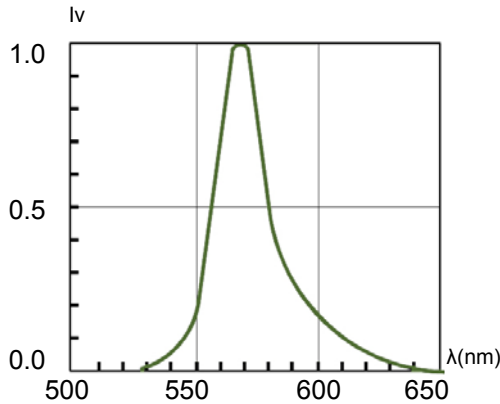
T_A = 25°C unless otherwise noted

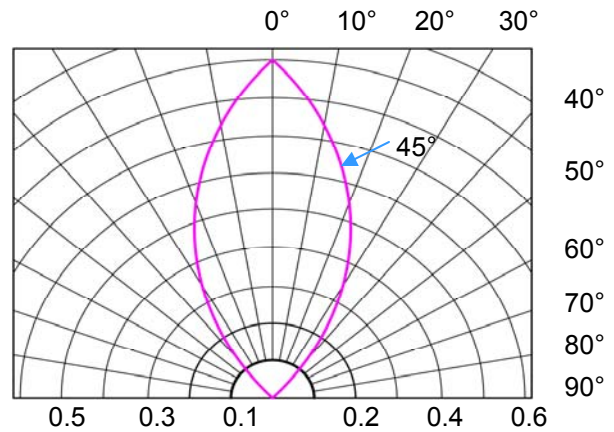Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

Fig. 2 Directivity Radiation Diagram

Fig. 3 Forward Current vs. Forward Voltage

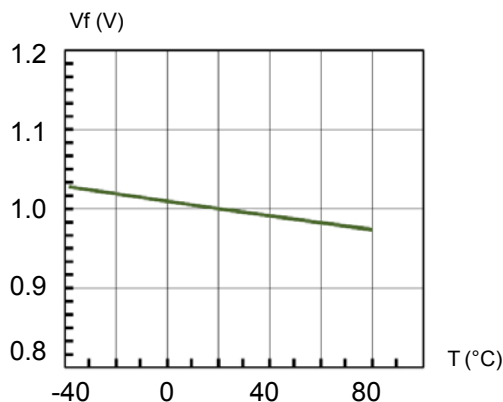Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA
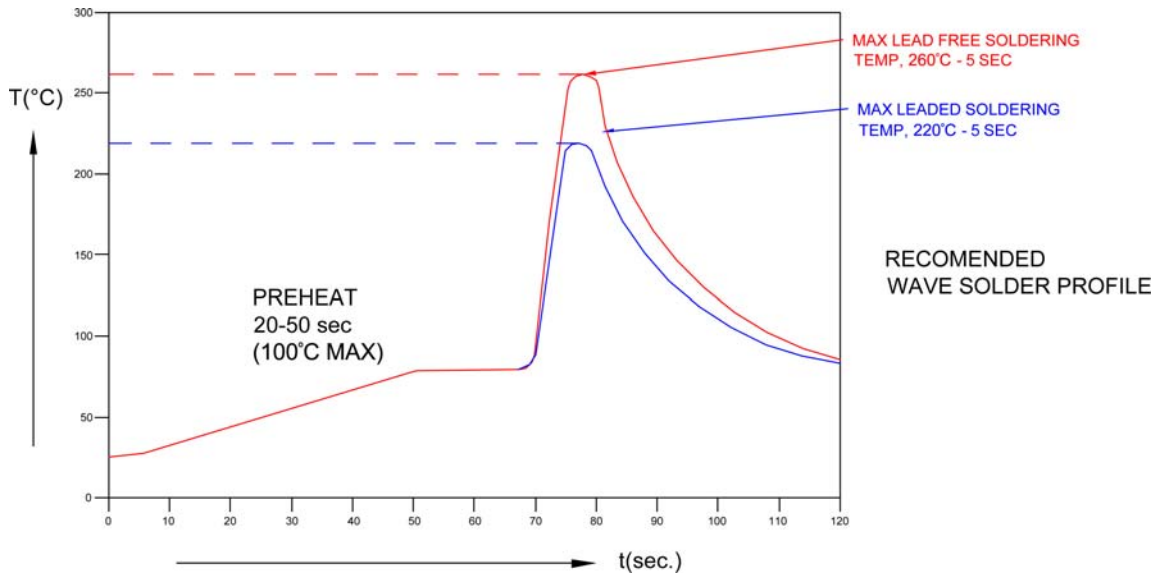
Fig. 5 Forward Voltage vs. Temperature

Fig. 6 Relative Luminous Intensity vs. Temperature

BIVAR

Recommended Soldering Conditions

Recommended Lead Free Wave Soldering Profile	
Preheat Temperature: 100ºC Max.	Peak Temperature: 260ºC Max.
Preheat Time: 20 ~ 50 Seconds	Solder Time Above 217ºC: 5 Seconds Max.
Note: Turn off top heater at preheat to prevent the lamp body directly exposed to the heat source.	

Packaging and Labeling Plan

Bivar, Inc. MSL 1
4 Thomas, Irvine, CA 92618-2593
LOT: XXX.XXXXX.XX

Part: **XXXX-XXX-XXX**

Quantity: **.500**

RoHS Compliant

AntiStatic Poly Bag with Desiccant
(500 pcs Max. per Bag)

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Authorized Distributor

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