Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Rectangular Package Discrete LED RED/GREEN, 2 x 5 mm, Bi-Color

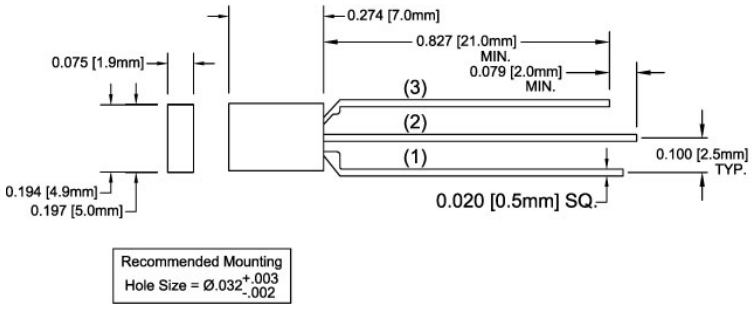
R5BC-3

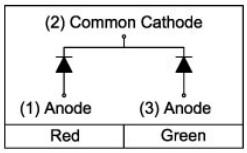
- **Rectangular Package**
- **RoHS Compliant**
- **White Diffused Lens**
- **Available in Shouldered Lead Frame style**
- **3-Lead Bi-Color LED**
- **Ideal for Status Indication and Bar Graph Displays**

Bivar Rectangular 2 x 5mm Package 3-Lead Bi-Color LED is ideal for those applications where multiple signals need to be displayed at the same location such as standby-on indication on server or computer peripherals. When needed, the third color signal can be created by powering up both chips together for on-off-standby applications with three distinct signals.. The rectangular package makes it ideal for greater indication visibility and creating bar graph displays when arranged in linear LED arrays. Bivar offers white diffused LED lens for uniform light output. The Shouldered Lead frame LED is ideal for vertical spacer assemblies and Right Angle Holder assemblies that require lead bends. This 3-Lead Bi -Color LED package comes in a common cathode Lead Frame configuration.

Part Number	Material	Emitted Color	Peak. Wavelength λp(nm) TYP.	Lens Appearance	Viewing Angle
R5BC-3	GaAsP/GaP	RED	625nm	White Diffused	120°
	GaP/GaP	GREEN	568nm		

Outline Dimensions





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.

Part Number Designation

R 5 B C - 3 - X X

- LED Body, mm
- Bi-Color
- 3-Lead
- Common Anode, CA
- Common Cathode, " " Blank

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

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
Reverse Voltage	5 V
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
R5BC-3	Red	/	2.0	2.8	/	20	/	100	/	/	/	/	4	/	120
	Green	/	2.1	2.8					/	/	/	/	4	/	

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

Typical Electrical / Optical Characteristics - Red

T_A = 25°C unless otherwise noted

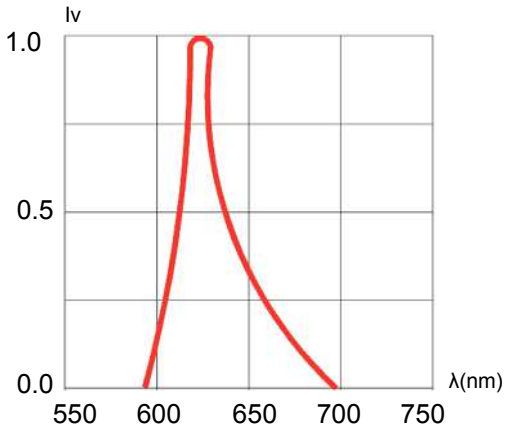


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

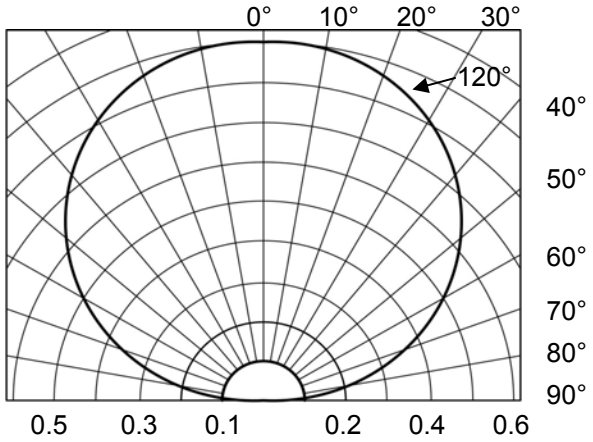


Fig. 2 Directivity Radiation Diagram

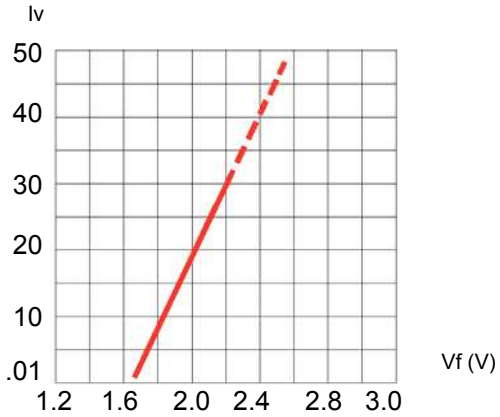


Fig. 3 Relative Intensity (10mA) vs. Forward Voltage

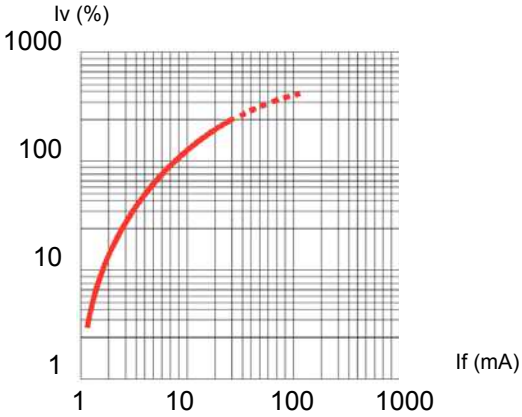


Fig. 4 Relative Luminous Intensity (%) vs. Forward Current

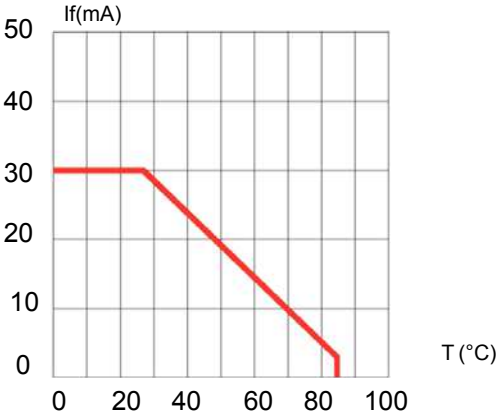


Fig. 5 Forward Current vs. Temperature

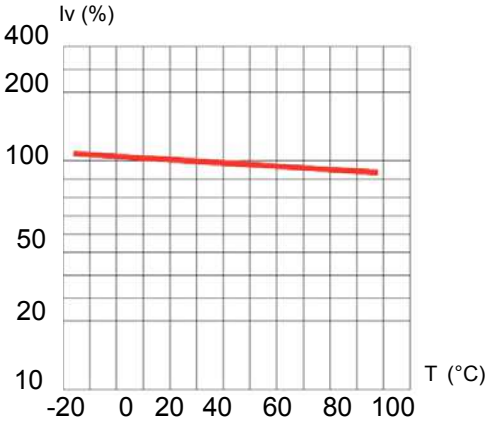


Fig. 6 Relative Intensity (%) vs. Temperature @ 20 mA

Typical Electrical / Optical Characteristics - Green

T_A = 25°C unless otherwise noted

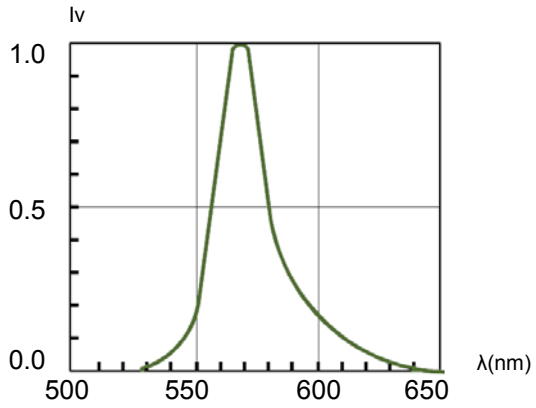


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

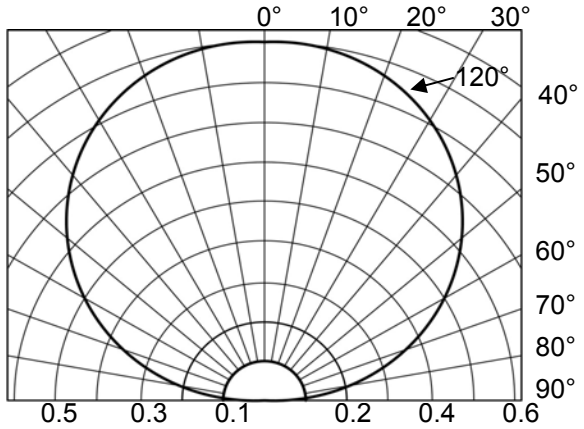


Fig. 2 Directivity Radiation Diagram

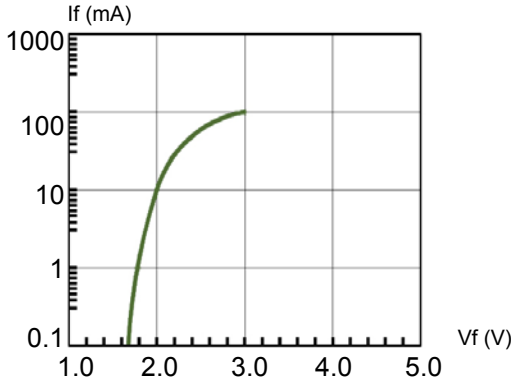


Fig. 3 Forward Current vs. Forward Voltage

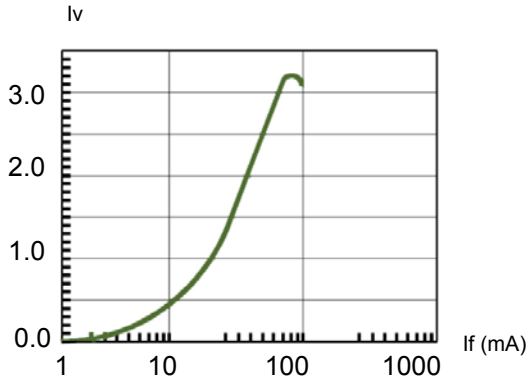


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

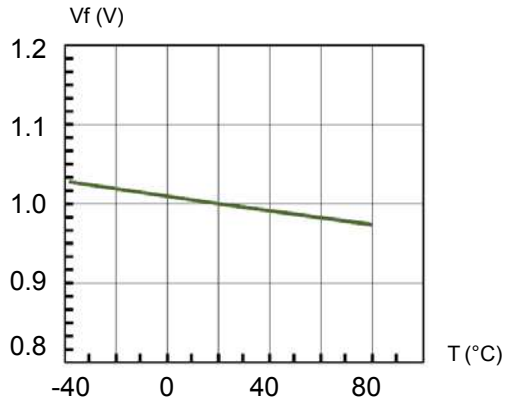


Fig. 5 Forward Voltage vs. Temperature

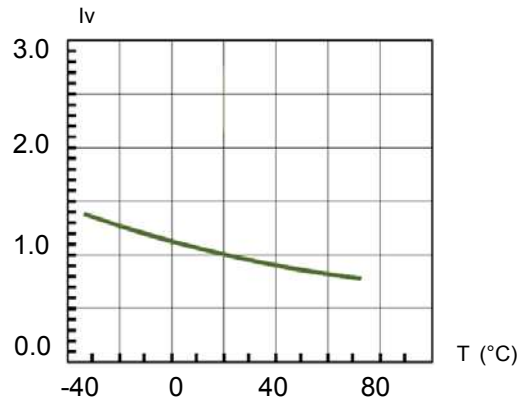
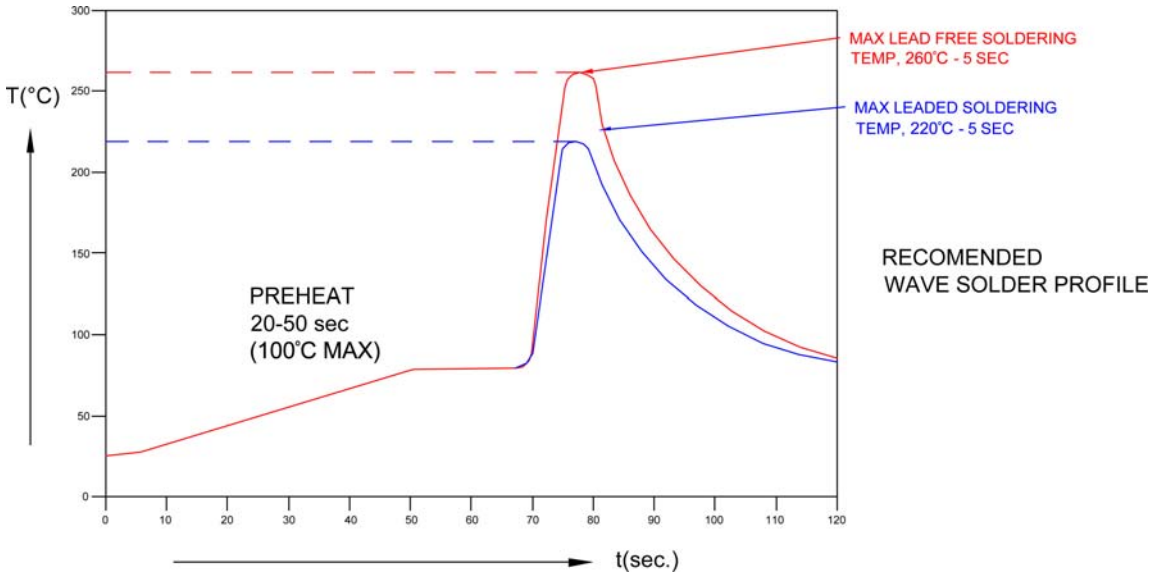


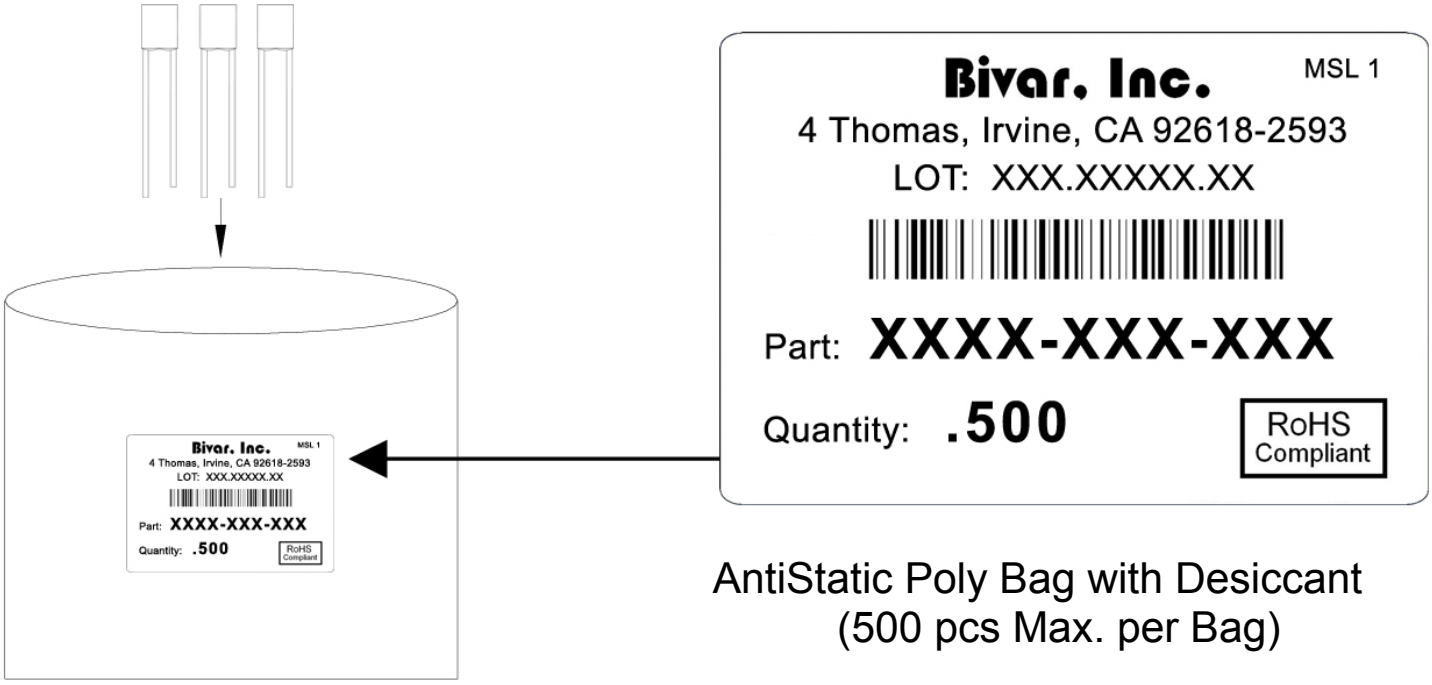
Fig. 6 Relative Luminous Intensity vs. Temperature

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



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