

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







1.8mm Package Discrete LED **AMBER**

BIVAR

1.8AX

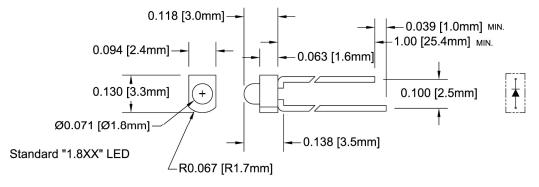
- 1.8mm Small Footprint Package
- **RoHS Compliant**
- Water Clear (C) and Diffused (D) Lenses
- Available in a Shouldered Lead Frame style
- **Ideal for Status Indication and Display**
- Recommended for Bivar H-381C and H-485C holder assemblies



Bivar 1.8mm Package LED may be used in almost any Application where smaller indication lights are required. Bivar offers water clear LED lens for maximum light output and diffused LED lens for uniform light output, The Shouldered Lead frame LED has a built in strain relief feature which is ideal for Right Angle Holder assemblies that require lead bends.

Part Number	Material	Emitted Color	Peak. Wavelength λρ(nm) TYP.	Lens Appearance	Viewing Angle	
1.8AC	1.8AC 1.8AD GaAsP/GaP		605nm	Water Clear	35°	
1.8AD			0031111	Amber Diffused	50°	

Outline Dimensions



Recommended Mounting Hole Size = $\emptyset.032^{+.003}_{-.002}$

- Outline Drawings Notes:

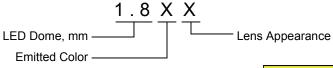
 1. All dimensions are in inches [millimeters].

 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









1.8mm Package Discrete LED **AMBER**



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

Electrical / Optical Characteristics

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

Part Number		orwai Itage		F	comm orwai rent (rd	Reverse Current (µA)	l Dominant		Luminous Intensity Iv (mcd)			Viewing Angle 2 Θ ½ (deg)	
	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MIN	TYP	MAX	MIN	TYP	MAX	TYP
1.8AC	/ 2.0 2.8	/ 20	20	,	100	1	1	1	1	30	/	35		
1.8AD	/	2.0	2.0	/	20	/	100	/	1	/	/	20	/	50

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

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

1.8mm Package Discrete LED AMBER



Typical Electrical / Optical Characteristics

 $T_A = 25$ °C unless otherwise noted

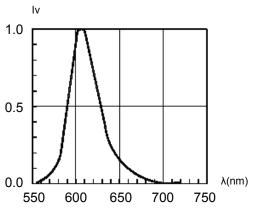


Fig. 1 Relative Luminous Intensity vs. Wavelength @ 20mA

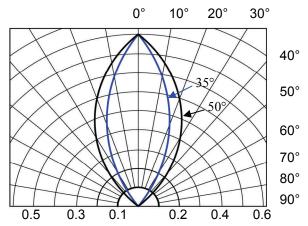


Fig. 2 Directivity Radiation Diagram

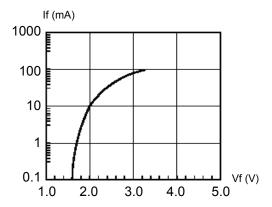


Fig. 3 Forward Current vs. Forward Voltage

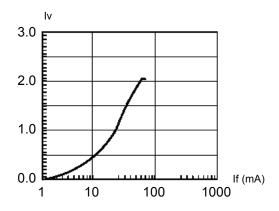


Fig. 4 Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

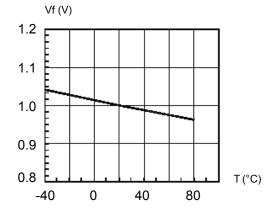


Fig. 5 Forward Voltage vs. Temperature

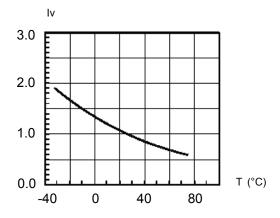
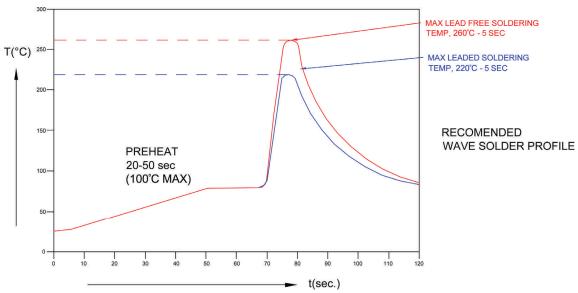


Fig. 6 Relative Luminous Intensity vs. Temperature

1.8mm Package Discrete LED AMBER

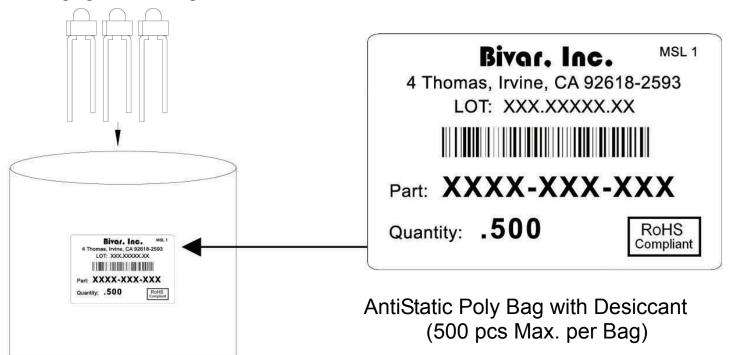


Recommended Soldering Conditions



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.					

Packaging and Labeling Plan



Bivar reserves the right to make changes at any time without notice.