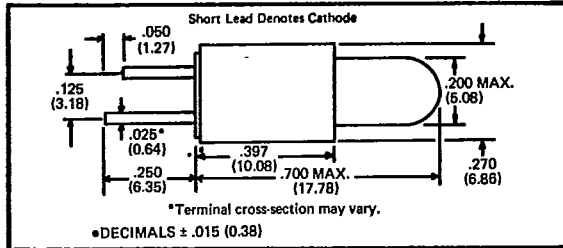




U.S. Pat. No. 4,358,708

# High Brightness LED Bi-Pin Lamps

## 560 series



**Maximum Ratings**

DC Forward Voltage @ 25° C	120% Specified Operating Voltage
DC Forward Voltage @ 71° C	100% Specified Operating Voltage
Reverse Voltage	5.0V
Operating Temperature	-55° C to +71° C
Storage Temperature	-55° C to +100° C
Lead Soldering Temperature	230° C for 5 sec.

**Features**

- High Intensity Light Source
- Wide or Narrow Beam angle
- 3 Colors
- Integral current limiting resistors for a range of operating points
- Package provides positive seating and spacing of the light source to the PCB surface.

**Applications**

- Incandescent Lamp Replacement
- High Brightness Backlight
- PCB Mounted Indicator

**Optical Characteristics**

Parameter	560-010X	-020X	-030X	-040X	-050X	-060X
Peak Wavelength (nm)	635	565	585	635	635	585
Spectral line half width (nm)	45	35	35	45	35	35
Total Viewing Angle (degrees)	65			28		
Typical Luminous Intensity	See figures 1&3					

**Operating Characteristics at 25° C**

Parameter	560-0X01	-0X02	-0X03	-0X04	-0X05	-0X06	-0X07	-0X08
Operating Voltage (V)	current limiting required	3.6	5	6	10	12	14	24
Forward Current (mA)	typ.	—	18	19	17	17	18	15
	max.	35†	25	25	25	20	21	20
R(Ω)	—	82	150	220	470	560	649	1,470

† Absolute maximum @ 25° C, derate linearly to 20 mA @ 71° C

560-0603

**LED Color & Transmittance**

01	Red	Diffused (Wide Angle)
02	Green	
03	Yellow	
04	Red	Non-Diffused* (Narrow Angle)
05	Green	
06	Yellow	

**Typical Operating Voltage**

01	No integral Resistor
02	3.6V
03	5.0V
04	6.0V
05	10.0V
06	12.0V
07	14.0V
08	24.0V

\* The narrow angle, non-diffused versions are suggested for backlighting applications.

Dialight reserves the right to make changes at anytime in order to improve design and to supply the best product possible.

# High Brightness LED Bi-Pin Lamps 560 series

## Lamps with Non-Diffused Lens

Fig. 1

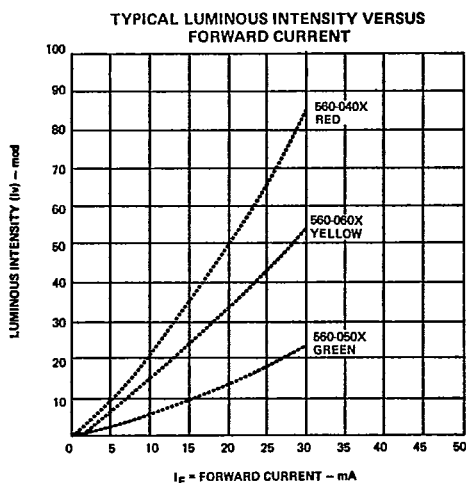
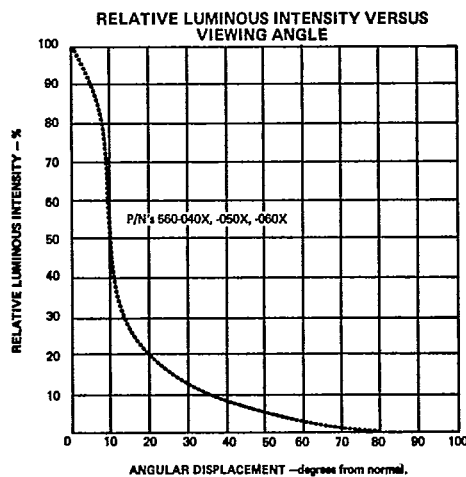


Fig. 2



## Lamps with Diffused Lens

Fig. 3

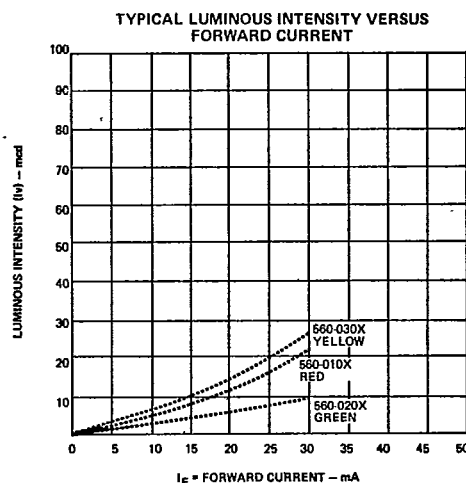


Fig. 4

