

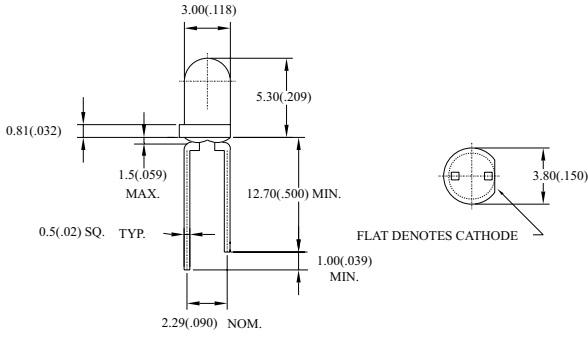
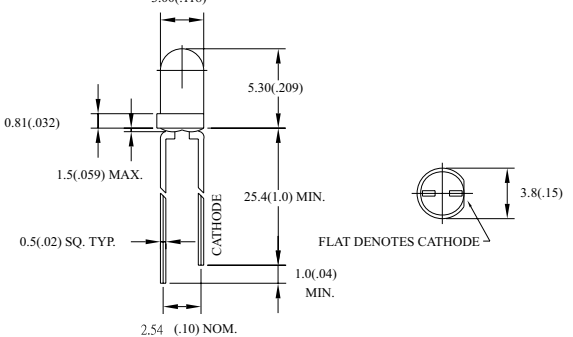
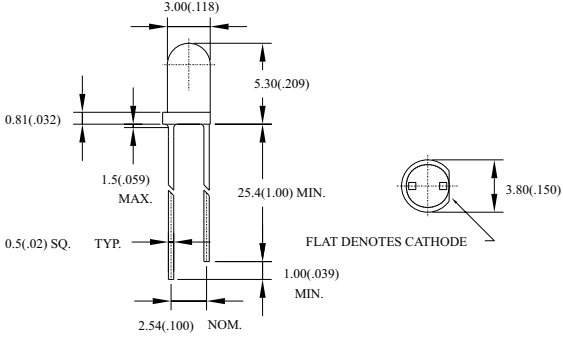
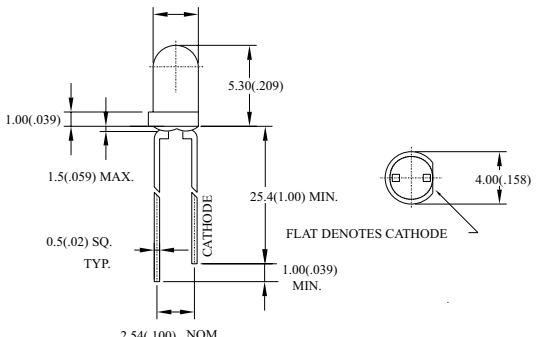
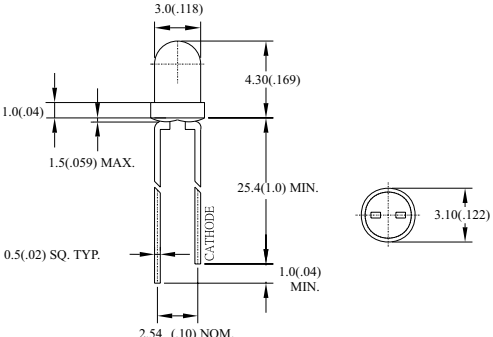
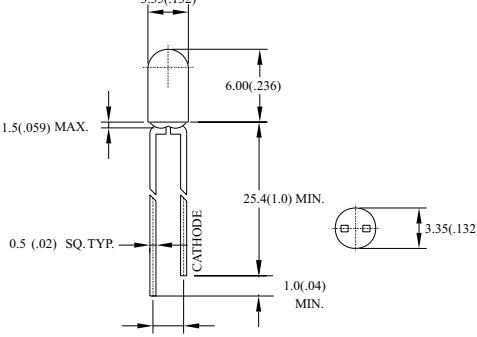
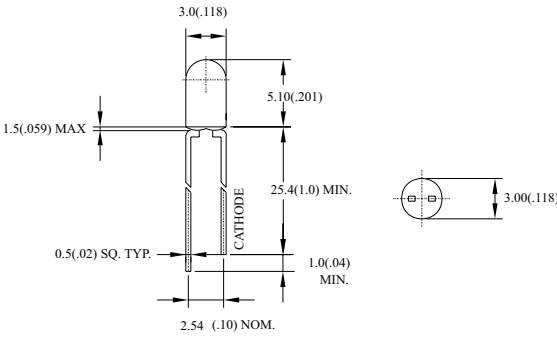
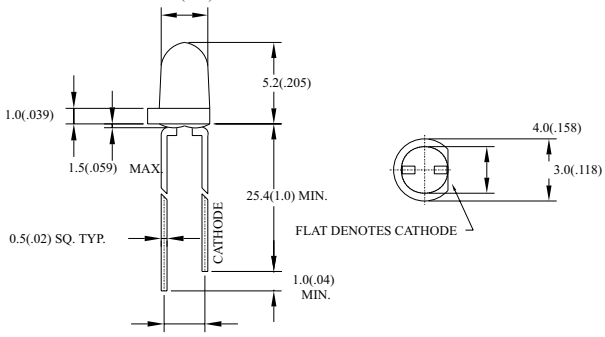


# STANDARD LED LAMPS(ROUND TYPES)

Package	Part No.	Chip		Lens Appearance	Absolute Maximum Ratings				Electro-optical Data(At 20mA)			Viewing Angle $2\theta 1/2$ (deg)	Drawing No.
		Material/ Emitted Color	Peak Wave Length $\lambda_p$ (nm)		$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Peak (mA)	Vf (V)		Iv (mcd)		
									Typ	Max	Typ.		
T-1 Standard 0.5" Lead 3 $\phi$	BL-B1121	GaAsP/GaAs/ Red	655	Red Diffused	40	80	40	200	1.7	2.0	3.0	45	L-017
	BL-B5121	GaP/GaP / Bright Red	700		90	40	15	50	2.2	2.6	4.0		
	BL-B4521	GaAsP/GaP/ Hi-Eff Red	635		45	80	30	150	2.0	2.6	20.0		
	BL-B2121	GaP/GaP / Green	568	Green Diffused	30	80	30	150	2.2	2.6	20.0		
	BL-B3121	GaAsP/GaP / Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	15.0		
	BL-B4121	GaAsP/GaP / Orange	635	Orange Diffused	45	80	30	150	2.0	2.6	20.0		
	BL-B4621	GaAsP/GaP / Hi-Eff Red	635	Red Trans	45	80	30	150	2.0	2.6	45.0		
T-1 Standard 1.0" Lead 3 $\phi$	BL-B1131	GaAsP/GaAs/ Red	655	Red Diffused	40	80	40	200	1.7	2.0	6.0	35	L-018
	BL-B5131	GaP/GaP / Bright Red	700		90	40	15	50	2.2	2.6	8.0		
	BL-B4531	GaAsP/GaP/ Hi-Eff Red	635		45	80	30	150	2.0	2.6	40.0		
	BL-B2131	GaP/GaP / Green	568	Green Diffused	30	80	30	150	2.2	2.6	40.0		
	BL-B3131	GaAsP/GaP / Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	30.0		
	BL-B2431	GaP/GaP / Green	568	Green Trans	30	80	30	150	2.2	2.6	80.0		
	BL-B3431	GaAsP/GaP / Yellow	585	Yellow Trans	35	80	30	150	2.1	2.6	65.0		
T-1 Standard 1.0" Lead 3 $\phi$	BL-B4541	GaAsP/GaP/ Hi-Eff Red	635	Red Diffused	45	80	30	150	2.0	2.6	40.0	35	L-019
	BL-B2141	GaP/GaP / Green	568	Green Diffused	30	80	30	150	2.2	2.6	40.0		
	BL-B3141	GaAsP/GaP/ Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	30.0		
	BL-B2441	GaP/GaP / Green	568	Green Trans	30	80	30	150	2.2	2.6	80.0		
	BL-B3441	GaAsP/GaP/ Yellow	585	Yellow Trans	35	80	30	150	2.1	2.6	65.0		
	BL-B2341	GaP/GaP / Green	568	Water Clear	30	80	30	150	2.2	2.6	80.0		
	BL-BX1341	GaP/GaP / Hi-Eff Green	568		35	80	30	150	2.1	2.6	120.0		
T-1 Standard 1.0" Lead 3.1 $\phi$	BL-B1131A	GaAsP/GaAs/ Red	655	Red Diffused	40	80	40	200	1.7	2.0	6.0	35	L-020
	BL-B5131A	GaP/GaP / Bright Red	700		90	40	15	50	2.2	2.6	8.0		
	BL-B4531A	GaAsP/GaP/ Hi-Eff Red	635		45	80	30	150	2.0	2.6	40.0		
	BL-B2131A	GaP/GaP / Green	568	Green Diffused	30	80	30	150	2.2	2.6	40.0		
	BL-B3131A	GaAsP/GaP/ Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	30.0		
	BL-B2431A	GaP/GaP / Green	568	Green Trans	30	80	30	150	2.2	2.6	80.0		
	BL-B3431A	GaAsP/GaP / Yellow	585	Yellow Trans	35	80	30	150	2.1	2.6	65.0		
T-1 Low Profile 1.0"Lead 3 $\phi$	BL-B4531E	GaAsP/GaP/ Hi-Eff Red	635	Red Diffused	45	80	30	150	2.0	2.6	30.0	45	L-021
	BL-B2131E	GaP/GaP / Green	568	Green Diffused	30	80	30	150	2.2	2.6	30.0		
	BL-B3131E	GaAsP/GaP /Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	20.0		
	BL-B2431E	GaP/GaP / Green	568	Green Trans	30	80	30	150	2.2	2.6	65.0		
	BL-B3431E	GaAsP/GaP /Yellow	585	Yellow Trans	35	80	30	150	2.1	2.6	55.0		
	BL-B2331E	GaP/GaP / Green	568	Water Clear	30	80	30	150	2.2	2.6	65.0		
	BL-B3331E	GaP/GaP /Yellow	585		35	80	30	150	2.1	2.6	55.0		
1.0"Lead High Flangeless 3.4 $\phi$	BL-B1131H	GaAsP/GaAs/ Red	655	Red Diffused	40	80	40	200	1.7	2.0	10.0	30	L-022
	BL-B5131H	GaP/GaP / Bright Red	700		90	40	15	50	2.2	2.6	13.0		
	BL-B4531H	GaAsP/GaP/ Hi-Eff Red	635		45	80	30	150	2.0	2.6	40.0		
	BL-B2131H	GaP/GaP / Green	568	Green Diffused	30	80	30	150	2.2	2.6	50.0		
	BL-B3131H	GaAsP/GaP/ Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	30.0		
	BL-B2431H	GaP/GaP / Green	568	Green Trans	30	80	30	150	2.0	2.6	100		
	BL-B4631H	GaAsP/GaP / Hi-Eff Red	635	Red Trans	45	80	30	150	2.0	2.6	100		
T-1 1.0"Lead High Flangeless 3.0 $\phi$	BL-B1131J	GaAsP/GaAs/ Red	655	Red Diffused	40	80	40	200	1.7	2.0	10.0	35	L-023
	BL-B5131J	GaP/GaP / Bright Red	700		90	40	15	50	2.2	2.6	13.0		
	BL-B4531J	GaAsP/GaP/ Hi-Eff Red	635		45	80	30	150	2.0	2.6	40.0		
	BL-B2131J	GaP/GaP /Yellow Green	568	Green Diffused	30	80	30	150	2.2	2.6	50.0		
	BL-B3131J	GaAsP/ GaP Yellow	585	Yellow Diffused	35	80	30	150	2.1	2.6	30.0		
	BL-B2431J	GaP/GaP / Green	568	Green Trans	30	80	30	150	2.0	2.6	100		
	BL-B4331M	GaAsP/GaP/Hi-Eff Red	635	Water Clear	45	80	30	150	2.0	2.6	100		
BL-B2331M	GaP/GaP/ Green	568	30		80	30	150	2.0	2.6	100			
BL-B3331M	GaAsP/GaP Yellow	585	35		80	30	150	2.1	2.6	30.0			
BL-B4431M	GaAsP/GaP / Hi-Eff Red	635	Orange Trans		45	80	30	150	2.0	2.6	100		
BL-B2431M	GaP/GaP / Green	568	Green Trans		30	80	30	150	2.0	2.6	100		

Remark: 1.Hi-Eff Red / High-Efficiency Red.  
 2.Trans / Transparent.  
 3.2  $\theta$  1/2 The off-axis angle at which the luminous intensity is half the axial luminous intensity.



L-017 BL-Bxx21 Series	L-018 BL-Bxx31 Series
 <p>3.00(.118) 5.30(.209) 0.81(.032) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 12.70(.500) MIN. 1.00(.039) MIN. 2.29(.090) NOM. 3.80(.150) FLAT DENOTES CATHODE</p>	 <p>3.00(.118) 5.30(.209) 0.81(.032) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 25.4(1.0) MIN. 1.0(.04) MIN. 2.54 (.10) NOM. 3.8(.15) FLAT DENOTES CATHODE</p>
L-019 BL-Bxx41 Series	L-020 BL-Bxx31A Series
 <p>3.00(.118) 5.30(.209) 0.81(.032) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 25.4(1.00) MIN. 1.00(.039) MIN. 2.54(.100) NOM. 3.80(.150) FLAT DENOTES CATHODE</p>	 <p>3.10(.122) 5.30(.209) 1.00(.039) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 25.4(1.00) MIN. 1.00(.039) MIN. 2.54(.100) NOM. 4.00(.158) FLAT DENOTES CATHODE</p>
L-021 BL-Bxx31E Series	L-022 BL-Bxx31H Series
 <p>3.0(.118) 4.30(.169) 1.0(.04) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 25.4(1.0) MIN. 1.0(.04) MIN. 2.54 (.10) NOM. 3.10(.122) FLAT DENOTES CATHODE</p>	 <p>3.35(.132) 6.00(.236) 1.5(.059) MAX. 0.5 (.02) SQ. TYP. 25.4(1.0) MIN. 1.0(.04) MIN. 2.54 (.10) NOM. 3.35(.132) FLAT DENOTES CATHODE</p>
L-023 BL-Bxx31J Series	L-024 BL-Bxx31M Series
 <p>3.0(.118) 5.10(.201) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 25.4(1.0) MIN. 1.0(.04) MIN. 2.54 (.10) NOM. 3.00(.118) FLAT DENOTES CATHODE</p>	 <p>2.78(.109) 5.2(.205) 1.0(.039) 1.5(.059) MAX. 0.5(.02) SQ. TYP. 25.4(1.0) MIN. 1.0(.04) MIN. 2.54 (.10) NOM. 4.0(.158) 3.0(.118) FLAT DENOTES CATHODE</p>

Notes : 1.All Dimensions are in millimeters (inches).  
2.Tolerance is  $\pm 0.25\text{mm}$  (.010").