Round Type, Bi-color LED lamp

BL-L819

Features:

- 8.0mm Round Type BI-COLOR LED Lamps, with 3 leads
- Ultra brightness.
- Choice of various viewing angles.
- Diffused, Transparent and Water clear lens are available.
- IC compatible /Low current capability.
- RoHs Compliance

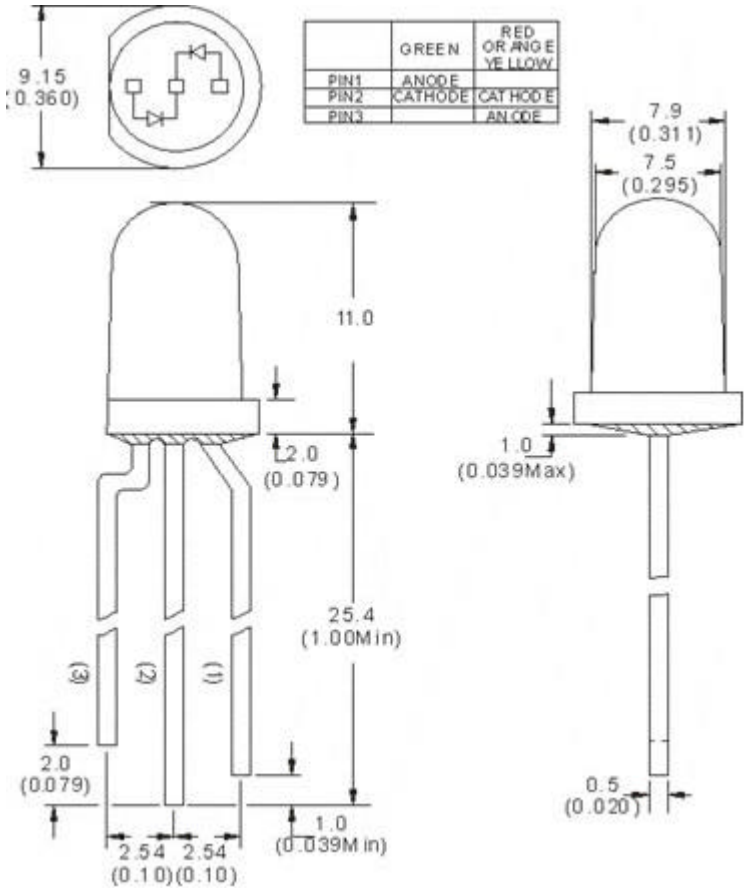
■ Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2?1/2(deg)
	Emitted Color	Material	λP (nm)		Typ	Max	Min.	Typ	
BL-L819EGW	Orange	GaAsP/GaP	635	Water Diff.	2.10	2.50	5	15	60
	Green	GaP/GaP	570		2.20	2.50	5	12	
BL-L819YGW	Yellow	GaAsP/GaP	585		2.10	2.50	5	12	
	Green	GaP/GaP	570		2.20	2.50	5	12	
BL-L819UEUGW	Ultra Yellow	AlGaInP	630		2.10	2.50	80	100	
	Ultra Green	AlGaInP	574		2.20	2.50	60	80	

■ Absolute maximum ratings (Ta=25°C)

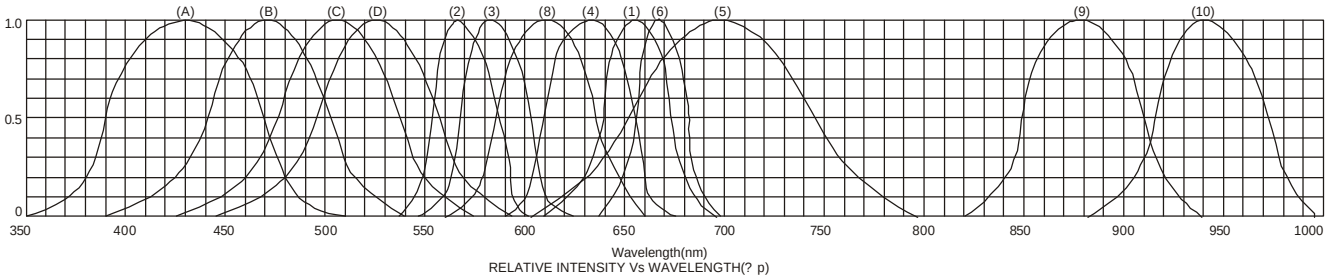
Parameter	E	UE	Y	G	UG	Unit
Forward Current I_F	25	30	25	30	30	mA
Power Dissipation P_d	60	65	60	65	75	mW
Reverse Voltage V_R	5	5	5	5	5	V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	mA
Operation Temperature T_{OPR}	-40 to +80					°C
Storage Temperature T_{STG}	-40 to +85					°C
Lead Soldering Temperature T_{SOL}	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)					°C

■ Package configuration & Internal circuit diagram



Notes:
1. All dimensions are in millimeters (inches)
2. Tolerance is ±0.25(0.01")unless otherwise noted.
3. Specifications are subject to change without notice.

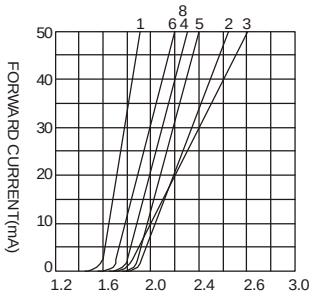
■ Typical electrical-optical characteristics curves:



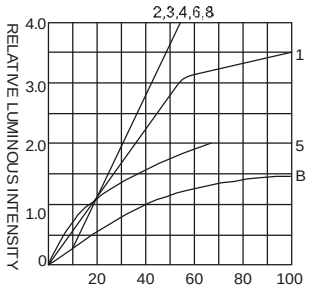
RELATIVE INTENSITY Vs WAVELENGTH(? p)

(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red

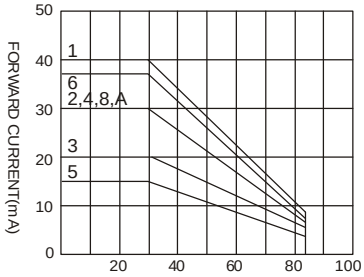
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue
(B) - InGaN/SiC 470nm/Blue
(C) - InGaN/SiC 505nm/Ultra Green
(D) - InGaAl/SiC 525nm/Ultra Green



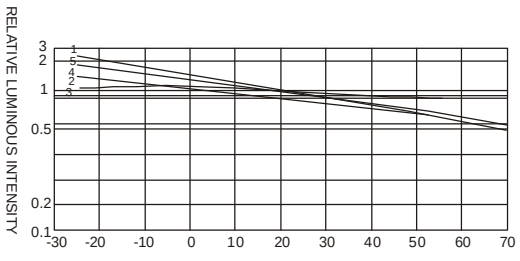
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



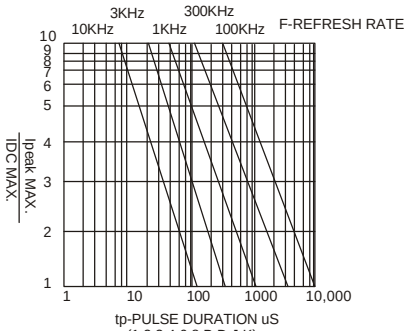
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



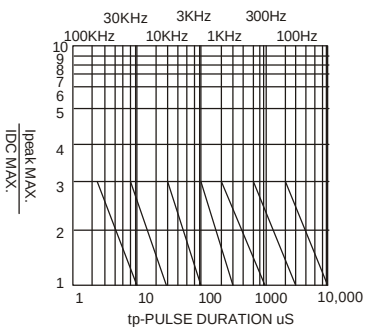
AMBIENT TEMPERATURE Ta(℃)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(℃)



tp-PULSE DURATION uS
(1,2,3,4,6,8,B.D.J.K)



tp-PULSE DURATION uS
(5)

NOTE:25℃ free air temperature unless otherwise specified

■ Packing and weighting

