

Round Type LED lamp

BL-L312

Features:

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



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

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (lv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λp (nm)		Typ	Max	Min.	Typ.	
					Water Clear				
BL-L312SRC	Hi Red	AlGaAs,SH	660		1.85	2.20	50	220	30
BL-L312LRC	Super Red	AlGaAs,DH	660		1.85	2.20	200	500	
BL-L312URC	Ultra Red	AlGaAs,DDH	660		1.95	2.20	500	900	
BL-L312UEC	Ultra Orange	AlGaInP	630		2.10	2.50	900	1800	
BL-L312UYC	Ultra Yellow	AlGaInP	590		2.10	2.50	900	2000	
BL-L312UGC	Ultra Green	AlGaInP	574		2.20	2.50	220	600	
BL-L312PGC	Ultra Pure Green	InGaN	525		3.80	4.50	1200	3000	
BL-L312BGC	Ultra Bluish Green	InGaN	505		3.80	4.50	900	2800	
BL-L312BC	Blue	InGaN	430		3.80	4.50	400	900	
BL-L312UBC	Ultra Blue	InGaN	470		2.70	4.20	500	1400	
BL-L312VC	UV	InGaN	405		3.80	4.50	100	150	
BL-L312UWC	Ultra White	InGaN	/		2.70	4.20	900	2000	

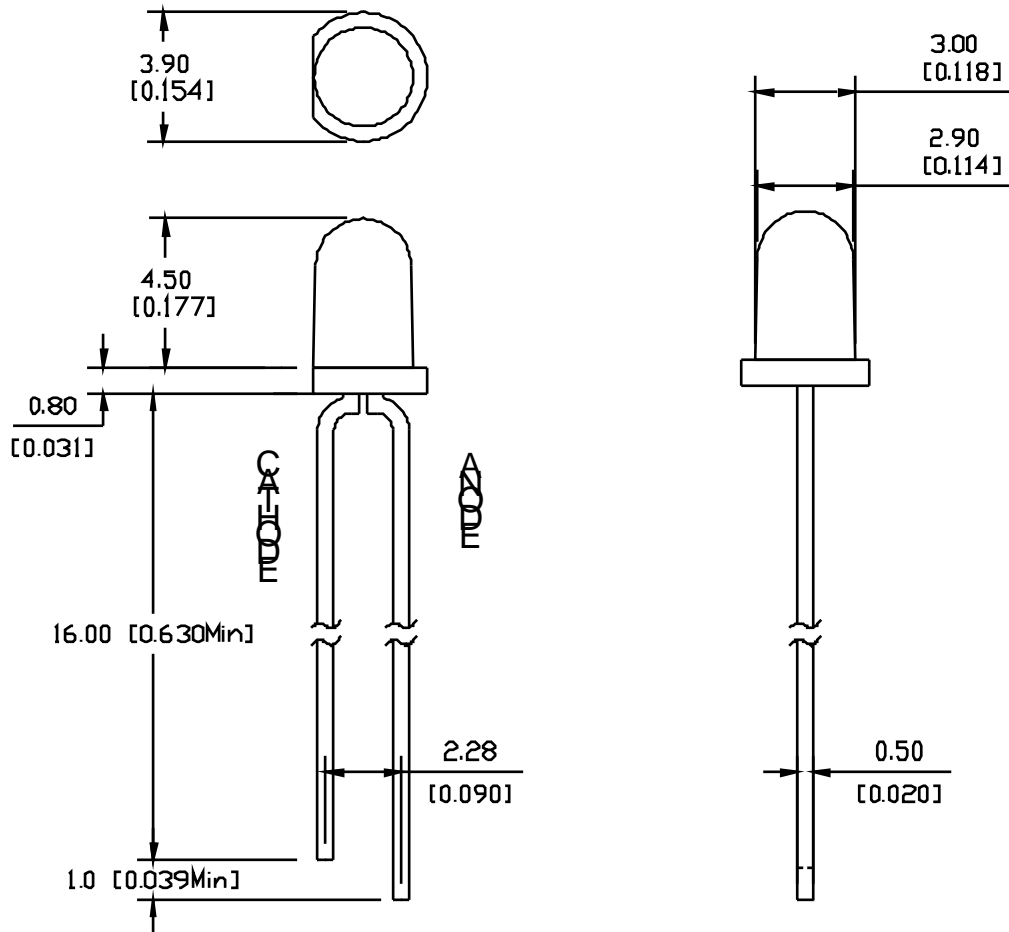
Absolute maximum ratings (Ta=25°C)

Parameter	SR	LR	UR	UE	UY	UG	PG	BG	B	UB	UV	W	Unit
Forward Current I _F	25	25	25	30	30	30	30	30	30	30	30	30	mA
Power Dissipation P _d	60	60	60	65	65	75	110	110	120	120	120	120	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150	150	100	100	100	100	100	mA
Operation Temperature T _{OPR}	-40 to +80												°C
Storage Temperature T _{STG}	-40 to +85												°C
Lead Soldering Temperature TSOL	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)												°C

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Package configuration & Internal circuit diagram



Notes:

1. All dimensions are in millimeters (inches)
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

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Typical electrical-optical characteristics curves:



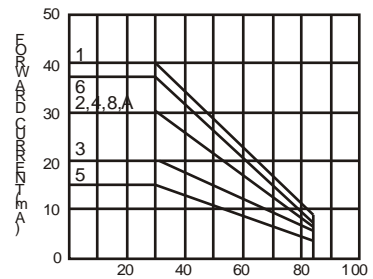
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) - GaN/SiC 430nm/Blue
- (B) - InGaN/SiC 470nm/Blue
- (C) - InGaN/SiC 505nm/Ultra Green
- (D) - InGaAlSiC 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 µs
(1,2,3,4,6,8,B,D,J,K)



(5)

NOTE:25 free air temperature unless otherwise specified

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Packing and weighting

