

Round Tower Type LED lamp

BL-L189

Features:

- Ø 1.8 mm Round Tower Type LED Lamps..
- Ø Ultra brightness.
- Ø Choice of various viewing angles.
- Ø Full color Display application.
- 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 (Iv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λ _p (nm)		Typ	Max	Min.	Typ.	
					Water Clear				
BL-L189SRC	Hi Red	AlGaAs,SH	660		1.85	2.20	50	200	50
BL-L189LRC	Super Red	AlGaAs,DH	660		1.85	2.20	200	500	
BL-L189URC	Ultra Red	AlGaAs,DDH	660		1.95	2.20	500	700	
BL-L189UEC	Ultra Orange	AlGaInP	630		2.10	2.50	120	700	
BL-L189UYC	Ultra Yellow	AlGaInP	590		2.10	2.50	150	600	
BL-L189UGC	Ultra Green	AlGaInP	574		2.20	2.50	50	800	
BL-L189PGC	Ultra Pure Green	InGaN	525		3.80	4.50	400	1200	
BL-L189BGC	Ultra Bluish Green	InGaN	505		3.80	4.50	400	1000	
BL-L189BC	Blue	InGaN	430		3.80	4.50	400	800	
BL-L189UBC	Ultra Blue	InGaN	470		2.70	4.20	400	1200	
BL-L189VC	UV	InGaN	405		3.80	4.50	100	150	
BL-L189UWC	Ultra White	InGaN	/		2.70	4.20	400	2500	

Absolute maximum ratings (Ta=25°C)

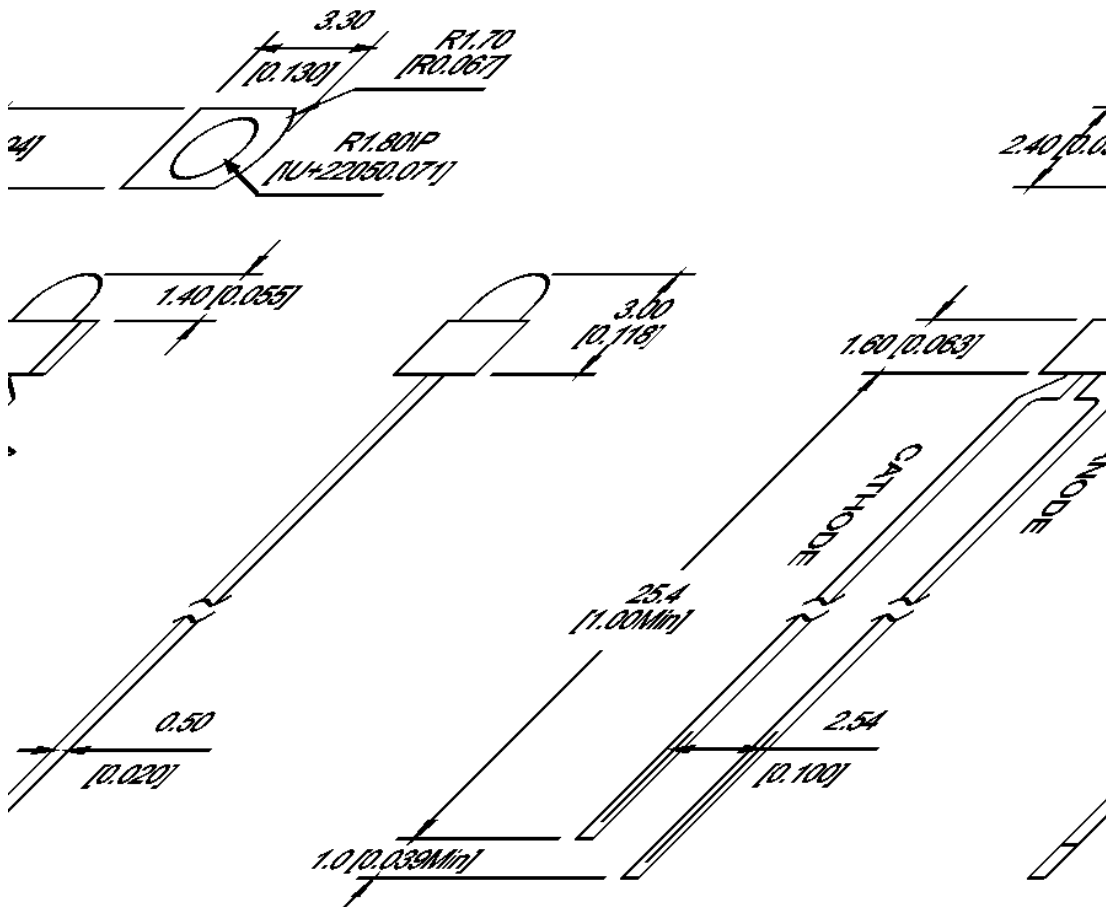
Parameter	SR	LR	UR	UE	UY	UG	PG	BG	B	UB	UV	W	Unit
Forward Current I _F	25	25	25	30	30	30	30	30	30	30	30	30	mA
Power Dissipation P _d	60	60	60	65	65	75	110	110	120	120	120	120	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150	150	100	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

BL-L189 Series



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.

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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



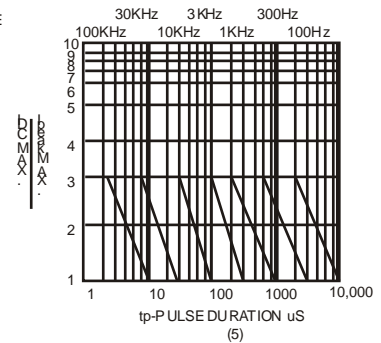
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



AMBIENT TEMPERATURE Ta ()
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta ()



NOTE: 25 free air temperature unless otherwise specified

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Packing and weighting

