

Cylindrical Type LED lamp

BL-L542

Features:

- Ø 5mm Cylindrical LED lamp, FLAT TOP
- 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 (Iv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λ _p (nm)		Typ	Max	Min.	Typ.	
					Water Clear	90			
BL-L542SRC	Hi Red	AlGaAs,SH	660	1.85	2.20	130	300	90	
BL-L542LRC	Super Red	AlGaAs,DH	660	1.85	2.20	270	500		
BL-L542URC	Ultra Red	AlGaAs,DDH	660	1.95	2.20	500	800		
BL-L542UEC	Ultra Orange	AlGaInP	630	2.10	2.50	260	600		
BL-L542UYC	Ultra Yellow	AlGaInP	590	2.10	2.50	260	500		
BL-L542UGC	Ultra Green	AlGaInP	574	2.20	2.50	120	250		
BL-L542PGC	Ultra Pure Green	InGaN	525	3.80	4.50	800	2000		
BL-L542BGC	Ultra Bluish Green	InGaN	505	3.80	4.50	700	1800		
BL-L542BC	Blue	InGaN	430	3.80	4.50	500	1000		
BL-L542UBC	Ultra Blue	InGaN	470	2.70	4.20	650	1800		
BL-L542VC	UV	InGaN	405	3.80	4.50	35	80		
BL-L542UWC	Ultra White	InGaN	/	2.70	4.20	1000	2500		

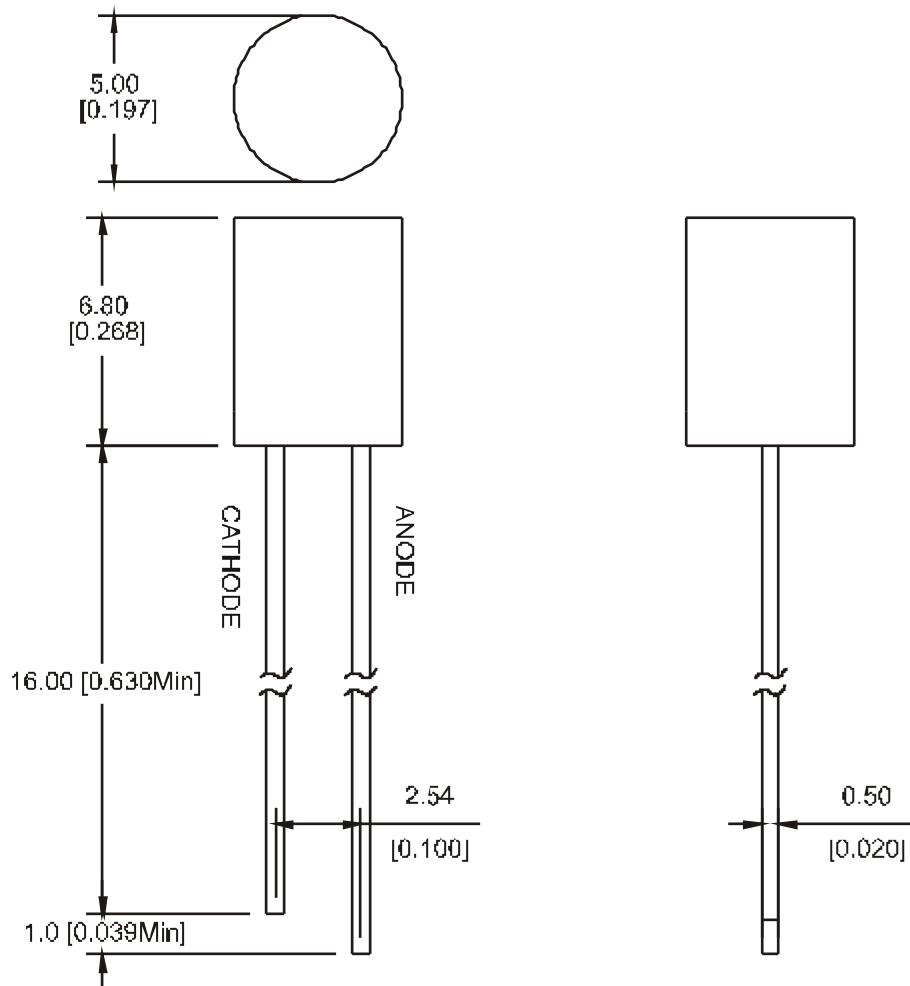
Absolute maximum ratings (Ta=25°C)

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 T _{SOL}	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 ± 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



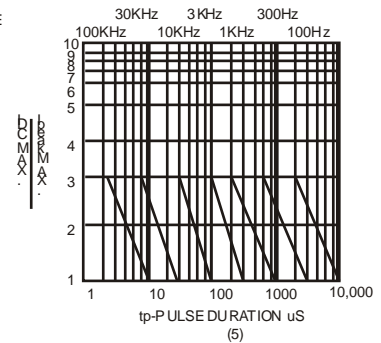
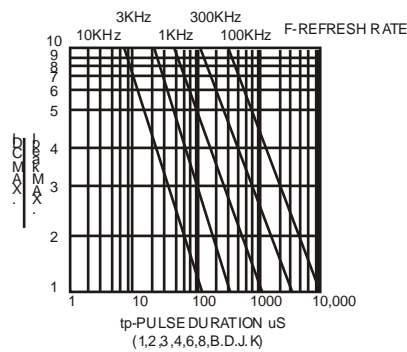
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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

