

Round Type, Blinking LED lamp

BL-L513XX-B-S3

Features:

- 5mm Round Blinking (flash) LED Lamps, candle random blinking
- Ultra brightness.
- Choice of various viewing angles.
- Diffused, Transparent and Water clear lens
- IC compatible /Low current capability.
- RoHs Compliance



Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=50mA)

Part Number	Chip			Lens Type	Pulse Rate(Hz) VDD=5V (Hz)			Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λ _P (nm)		Min	Typ	Max	Min.	Typ.	
BL-L513URC-B-S3	Ultra Red	AlGaAs,DDH	660	Water Clear	-	-	-	600	1000	20
BL-L513UEC-B-S3	Ultra Orange	AlGaInP	630		-	-	-	800	2000	
BL-L513UYC-B-S3	Ultra Yellow	AlGaInP	590		-	-	-	1000	2200	
BL-L513UGC-B-S3	Ultra Green	AlGaInP	574		-	-	-	300	700	
BL-L513PGC-B-S3	Ultra Pure Green	InGaN	525		-	-	-	2000	5000	
BL-L513BGC-B-S3	Ultra Bluish Green	InGaN	505		-	-	-	1800	4000	
BL-L513UBC-B-S3	Ultra Blue	InGaN	470		-	-	-	2000	5000	
BL-L513UWC-B-S3	Ultra White	InGaN	/		-	-	-	3000	10000	

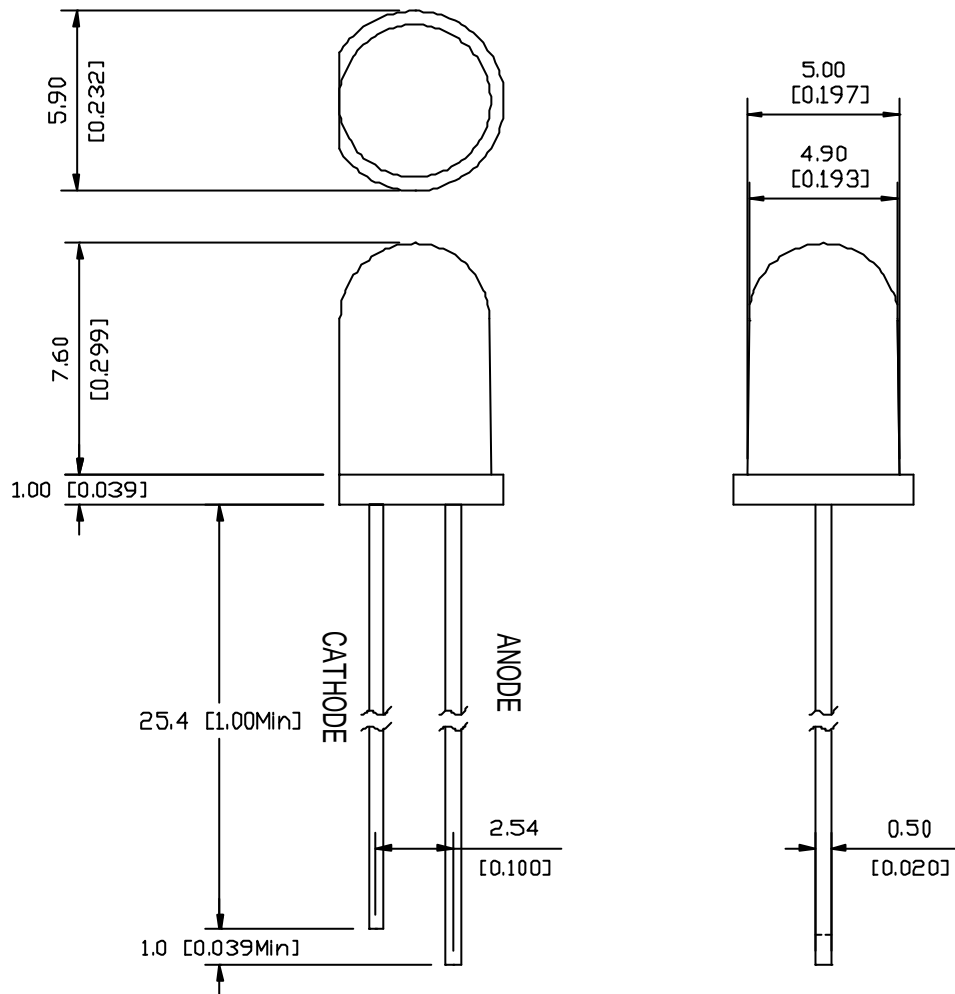
Absolute maximum ratings (Ta=25°C)

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



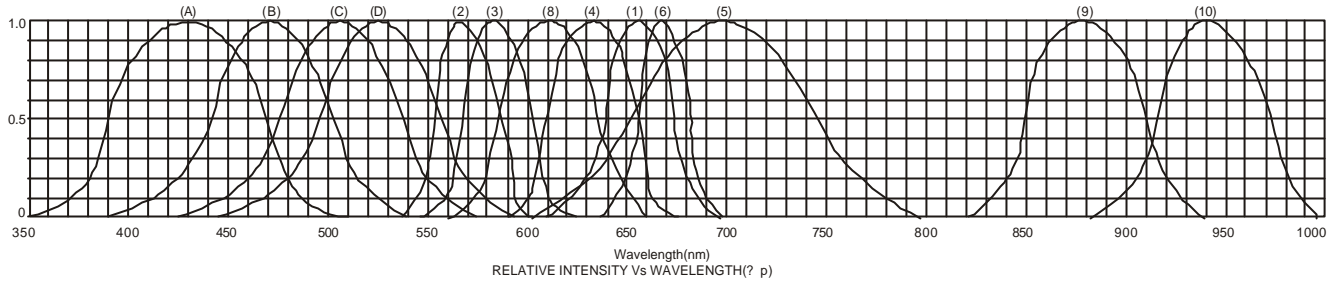
Notes:

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.

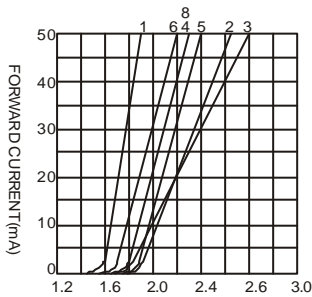
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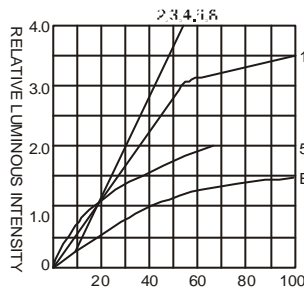
Typical electrical-optical characteristics curves:



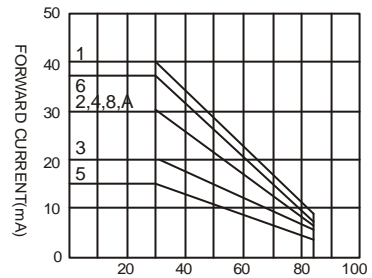
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue |
| (5) - GaP 700nm/Bright Red | (C) - InGaN/SiC 505nm/Ultra Green |
| (6) - GaAlAs/GaAs 660nm/Super Red | (D) - InGaAl/SiC 525nm/Ultra Green |
| (8) - GaAsP/GaP 610nm/Super Red | |



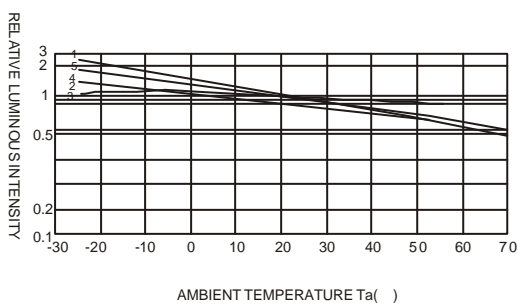
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



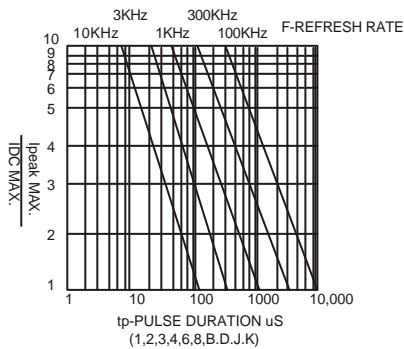
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



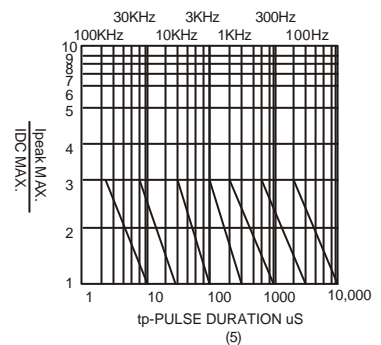
AMBIENT TEMPERATURE Ta ()
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



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