

Round Type LED lamp

BL-L813

Features:

- Ø 8mm Round 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 (Iv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λp (nm)		Typ	Max	Min.	Typ.	
BL-L813SRC	Hi Red	AlGaAs,SH	660	Water Clear	1.85	2.20	50	250	25
BL-L813LRC	Super Red	AlGaAs,DH	660		1.85	2.20	250	600	
BL-L813URC	Ultra Red	AlGaAs,DDH	660		1.95	2.20	600	1000	
BL-L813UEC	Ultra Orange	AlGaInP	630		2.10	2.50	800	1500	
BL-L813UYC	Ultra Yellow	AlGaInP	590		2.10	2.50	600	1300	
BL-L813UGC	Ultra Green	AlGaInP	574		2.20	2.50	200	700	
BL-L813PGC	Ultra Pure Green	InGaN	525		3.80	4.50	1000	5000	
BL-L813BGC	Ultra Bluish Green	InGaN	505		3.80	4.50	800	4000	
BL-L813BC	Blue	InGaN	430		3.80	4.50	300	800	
BL-L813UBC	Ultra Blue	InGaN	470		2.70	4.20	800	2000	
BL-L813VC	UV	InGaN	405		3.80	4.50	80	120	
BL-L813UWC	Ultra White	InGaN	/		2.70	4.20	1000	5000	

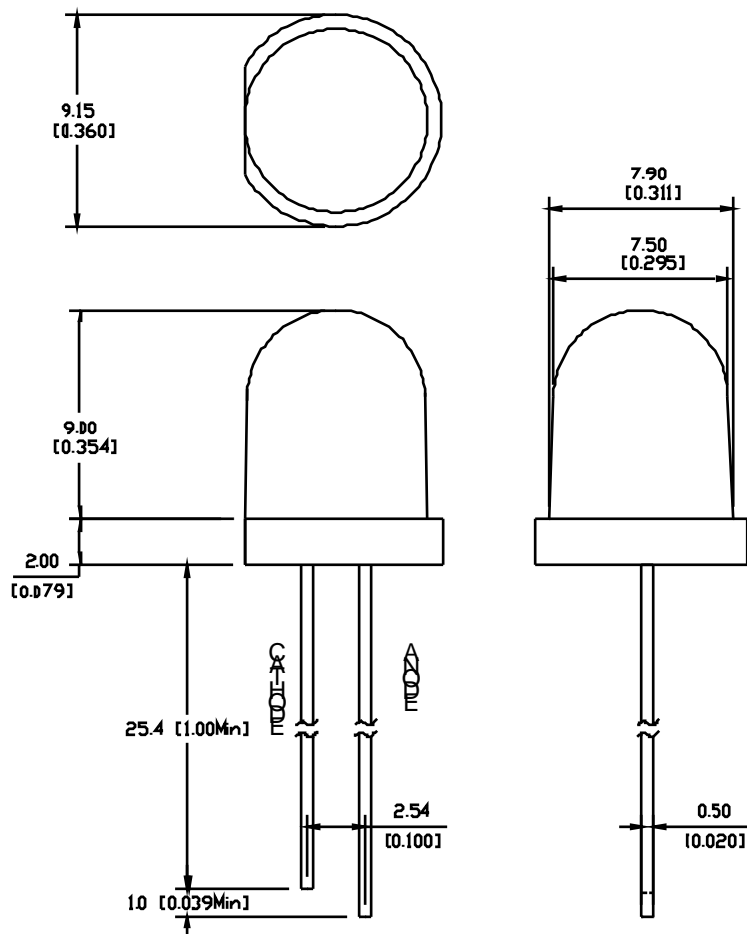
Absolute maximum ratings (Ta=25°C)

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 _{SOI}	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.

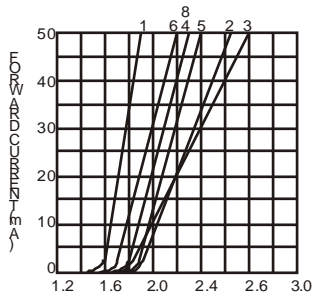
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Typical electrical-optical characteristics curves:



- (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



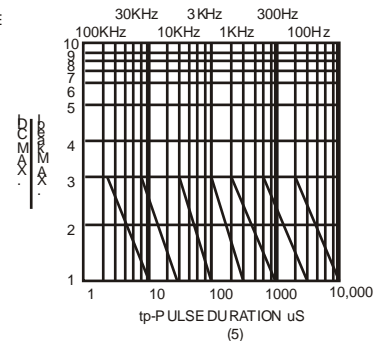
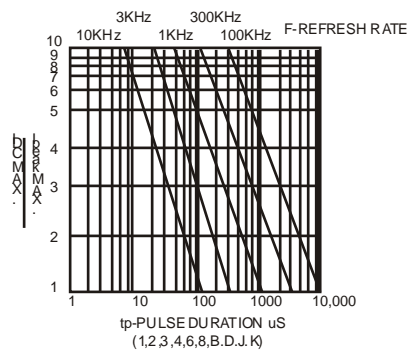
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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

