

Round Type, FULL COLOR LED lamp
BL-L515
Features:

- 5mm Round Type , FULL COLOR LED lamp
- Ultra brightness.
- Choice of various viewing angles.
- Diffused, Transparent and Water clear lens
- IC compatible /Low current capability.
- RoHs Compliance


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:mcld		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λ _p (nm)		Typ	Max	Min.	Typ.	
					BL-L515RGBC-CA	Ultra Orange	AlGaInP	630	
	Ultra Pure Green	InGaN	525		3.80	4.50	2000	5000	
	Blue	InGaN	430		3.80	4.50	800	2000	
BL-L515RGBW-CA	Ultra Orange	AlGaInP	630	Water Diff.	2.10	2.50	200	500	30
	Ultra Pure Green	InGaN	525		3.80	4.50	300	600	
	Blue	InGaN	430		3.80	4.50	150	300	
BL-L515RGBC-CC	Ultra Orange	AlGaInP	630	Water Clear	2.10	2.50	800	2000	20
	Ultra Pure Green	InGaN	525		3.80	4.50	2000	5000	
	Blue	InGaN	430		3.80	4.50	800	2000	
BL-L515RGBW-CC	Ultra Orange	AlGaInP	630	Water Diff.	2.10	2.50	200	500	30
	Ultra Pure Green	InGaN	525		3.80	4.50	300	600	
	Blue	InGaN	430		3.80	4.50	150	300	

Note: -CC: common Cathode, -CA: common Anode

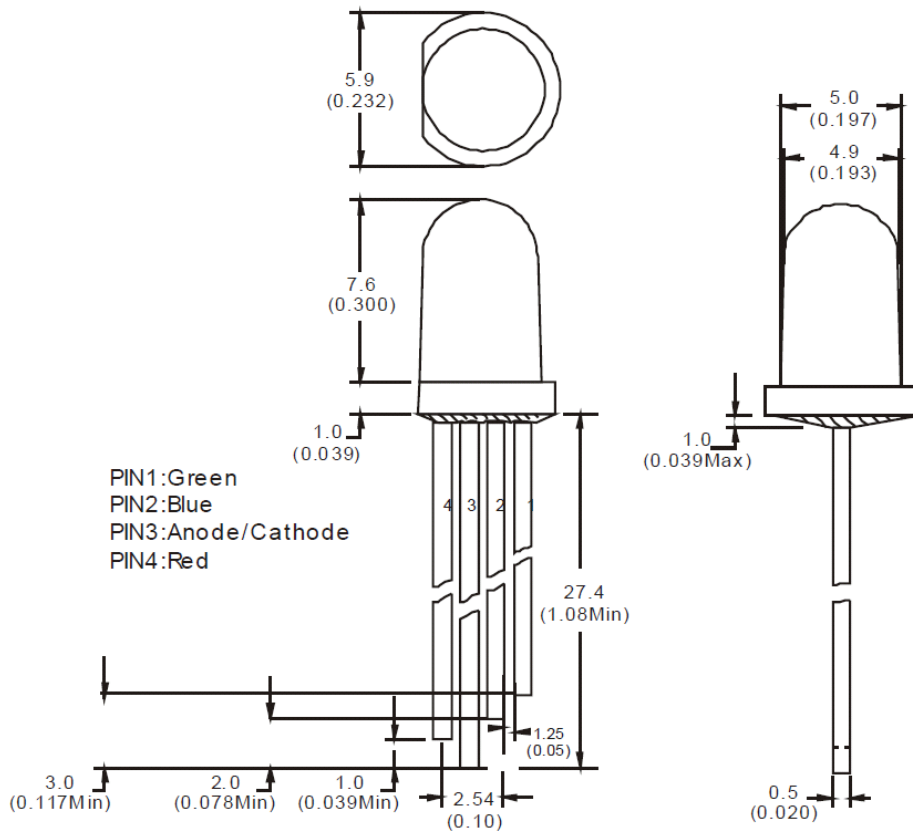
Absolute maximum ratings (Ta=25°C)

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

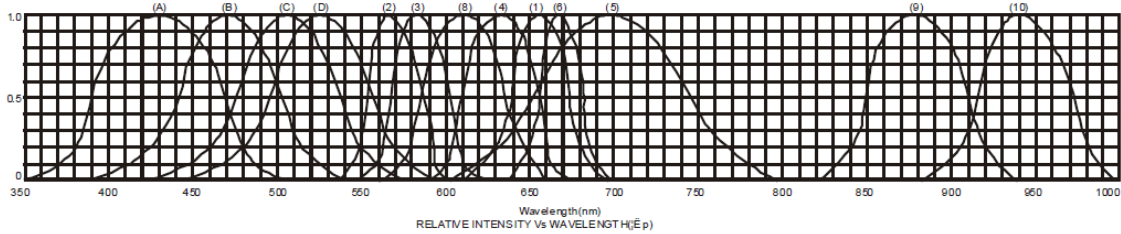


Notes:

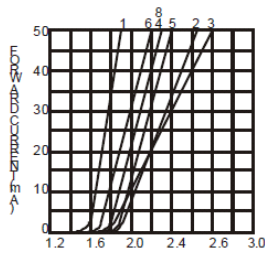
1. All dimensions are in millimeters (inches)
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

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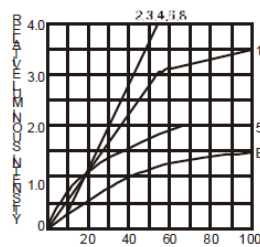
□ **Typical electrical-optical characteristics curves:**



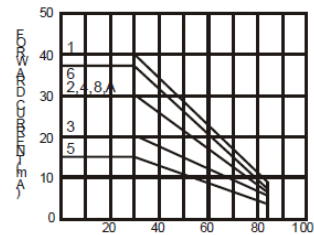
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue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



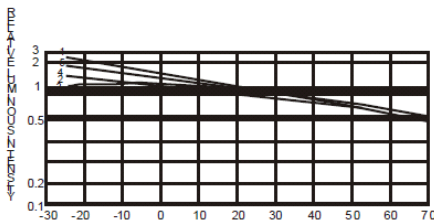
FORWARD CURRENT (mA)
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



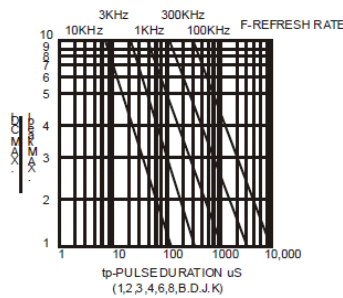
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



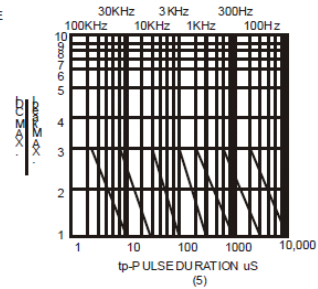
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



RELATIVE LUMINOUS
INTENSITY VS. AMBIENT
TEMPERATURE



RELATIVE LUMINOUS
INTENSITY VS. PULSE
DURATION



RELATIVE LUMINOUS
INTENSITY VS. PULSE
DURATION

NOTE: 25°C free air temperature unless otherwise specified