Round Type, FULL COLOR LED lamp, Random flash

BL-L516

Features:

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

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

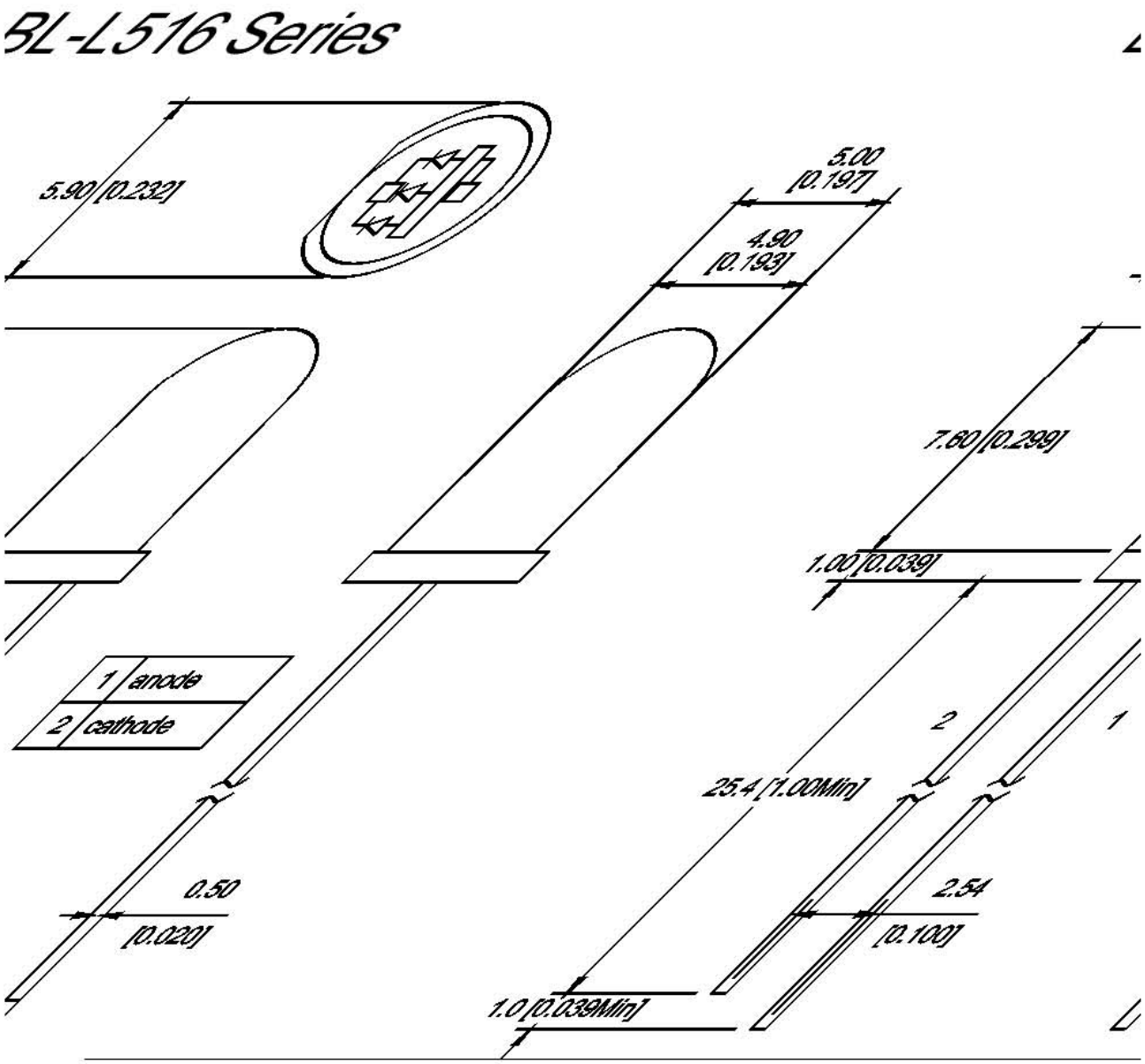
Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2θ1/2 (deg)
	Emitted Color	Material	λP (nm)		Typ	Max	Min.	Typ.	
BL-L516RGBC	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-L516RGBW	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	

Absolute maximum ratings (Ta=25°C)

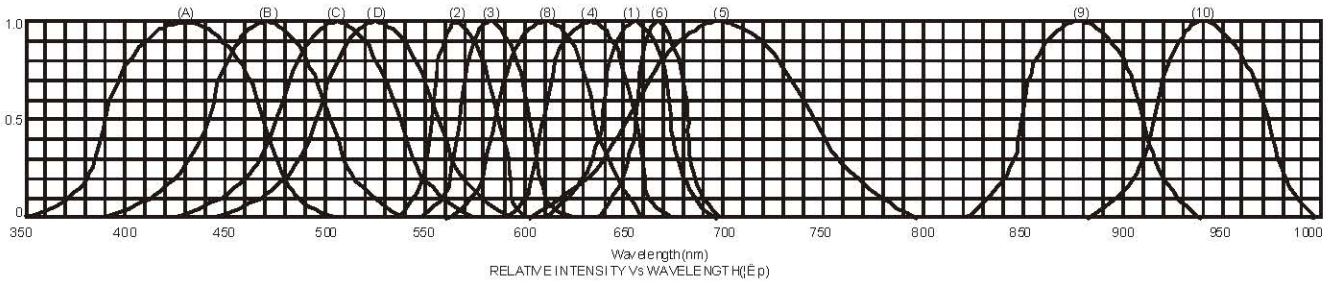
Parameter	UE	PG	UB	Unit
Forward Current I_F	30	30	30	mA
Power Dissipation P_d	65	110	120	mW
Reverse Voltage V_R	5	5	5	V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	100	mA
Operation Temperature T_{OPR}	-40 to +80			°C
Storage Temperature T_{STG}	-40 to +85			°C
Lead Soldering Temperature T_{SOL}	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)			°C

Package configuration & Internal circuit diagram

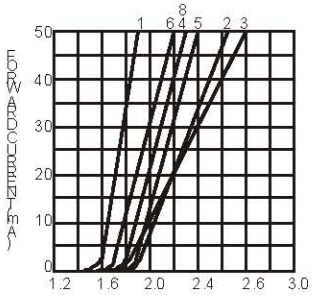


Notes:
1. All dimensions are in millimeters (inches)
2. Tolerance is ±0.25(0.01")unless otherwise noted.
3. Specifications are subject to change without notice.

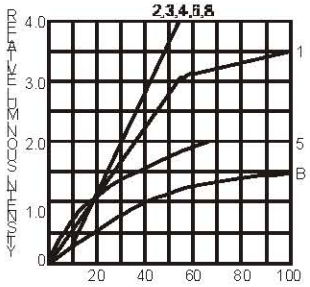
Typical electrical-optical characteristics curves:



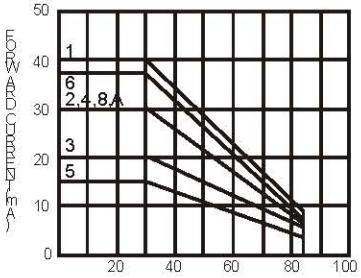
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue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



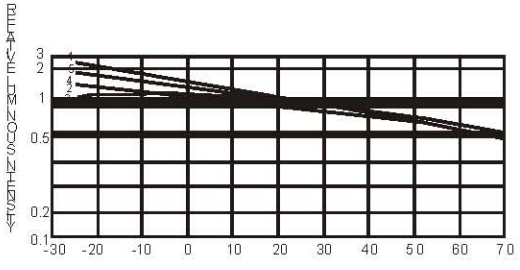
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



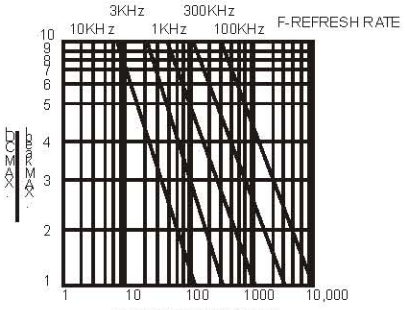
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



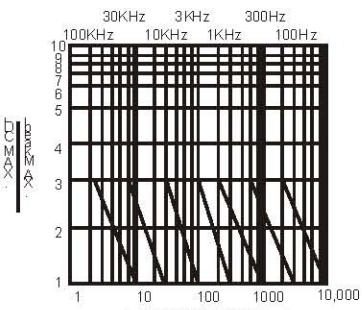
AMBIENT TEMPERATURE Ta(℃)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



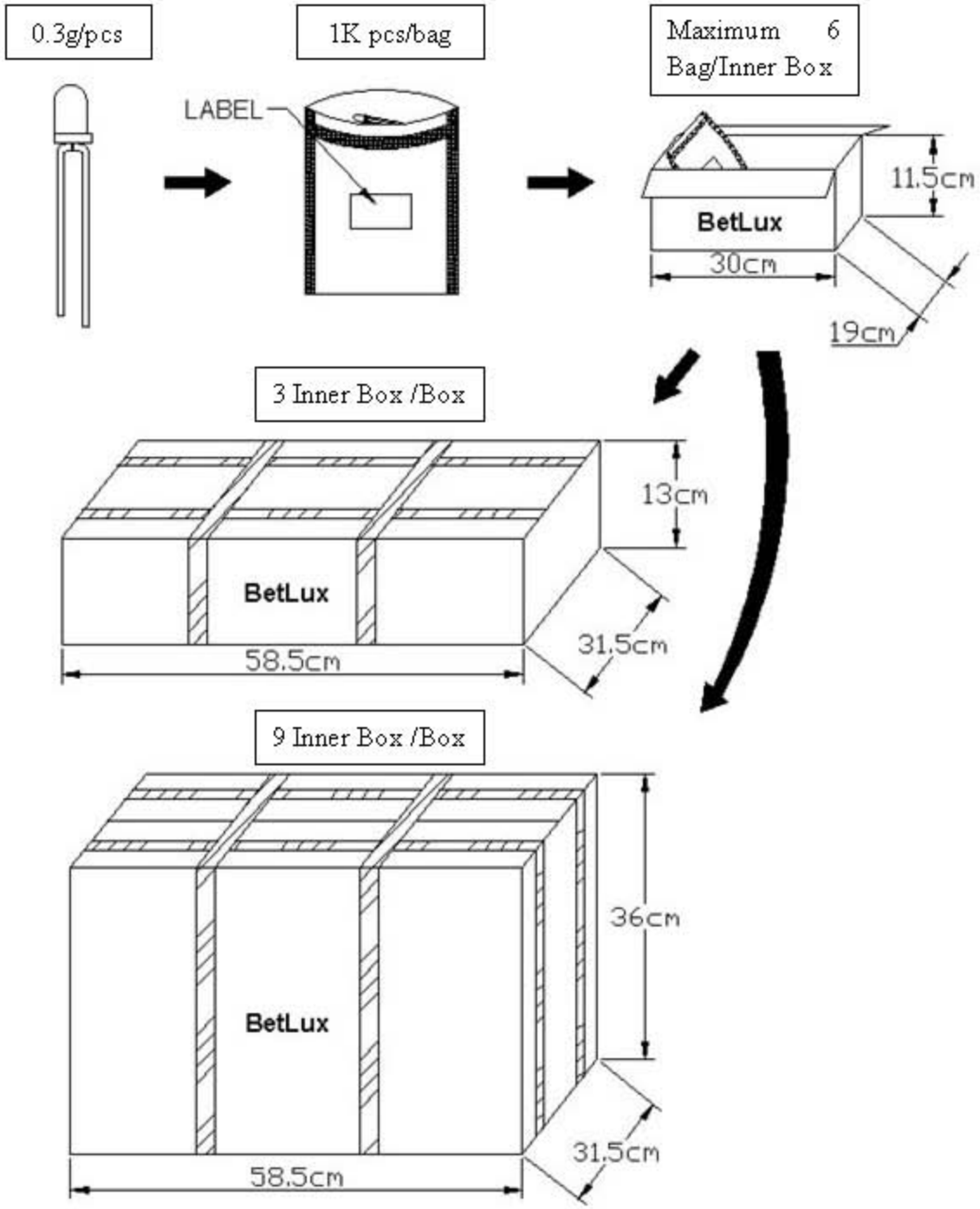
AMBIENT TEMPERATURE Ta(℃)



tp-PULSE DURATION uS
(1,2,3,4,6,8,B,D,J,K)



tp-PULSE DURATION uS
(5)

NOTE:25℃ free air temperature unless otherwise specified

Packing and weighting