

**LED LAMP CLUSTER**
**BL-CS19AR3G6**
**Features:**

- Ø 19mm Square LED lamp cluster
- Ø High visibility
- Ø Emitting Color: red,green,blue
- Ø No of Built-in 5mm LED Lamps :
- Ø Ultra orange - 3pcs,green – 6pcs
- Ø Waterproof Package With Hood Suitable
- Ø For Outdoor and Indoor Information Boards


**Selection Guide**

Part No.	Description
BL-CS19AR3G6	19mm square Lamp cluster .3red ,6 green, square packed

**Description:**

-Color Code &amp; Chip characteristics: (Test Condition: IF=20mA)

Part No.	Built-in Lamp Package	Built-in Lamp Part No. BL-	Chip		Lens Appearance	Electro-optical Data(At 20mA)			Viewing Angle 2:θ/2 (deg)
			Material/Emitted Color	Peak Wave Length λp (nm)		Vf (V)		Iv (mcd)	
						Typ	Max	Typ	
BL-CS19 AR3G6	4x5x7mm 1.0" Lead Oval	L563UEC	AlGaInP/ Ultra Orange	630	Water clear	2.10	2.50	750	X-X
		L563UGC	AlGaInP/ Ultra Green	574	Water clear	2.20	2.50	600	45 Y-Y 25

Notes:

- θ/2 Is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

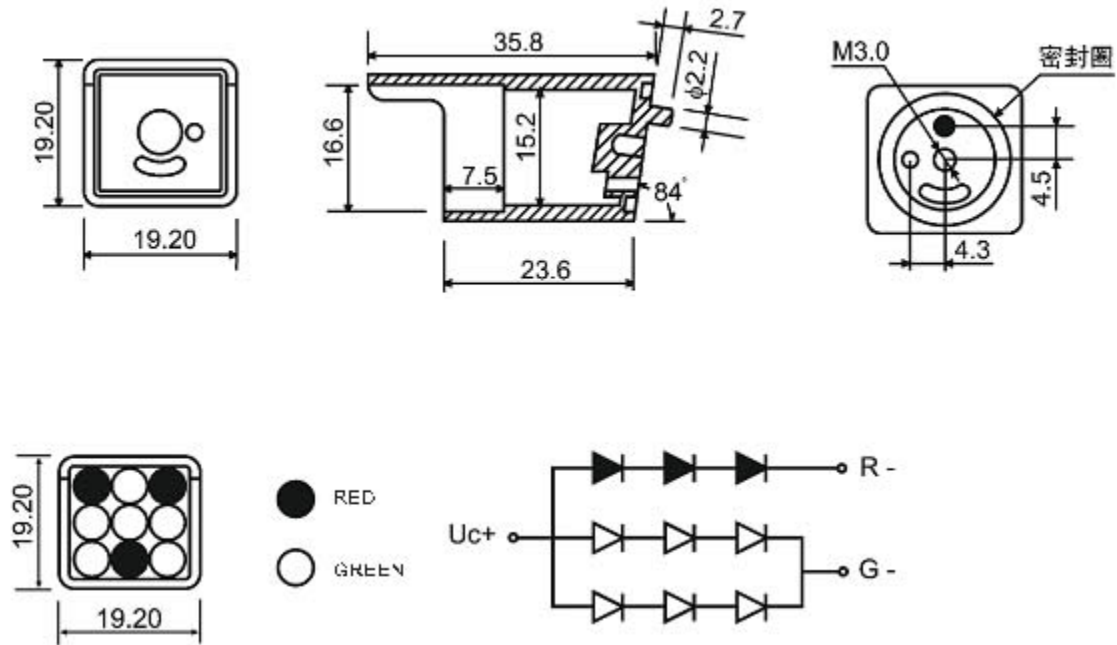
**Absolute Maximum Rating (Each Lamp, Ta=25°C Derate above 25°C)**

Characteristic	Symbol	Ultra Orang	Ultra Green	Unit
Spectral Line Half width	Δλ	17	30	nm
Pulse Forward Current	IFp	150	150	mA
DC Forward Current	IF	30	30	mA
Reverse Voltage	VR	5	5	V
Power Dissipature	PD	65	75	mW
Operating Temperature	Topr	-40°C-80°C		
Storage Temperature	Tstg	-40°C-85°C		
Lead Soldering Temperature		Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)		

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Package configuration & Internal circuit diagram:



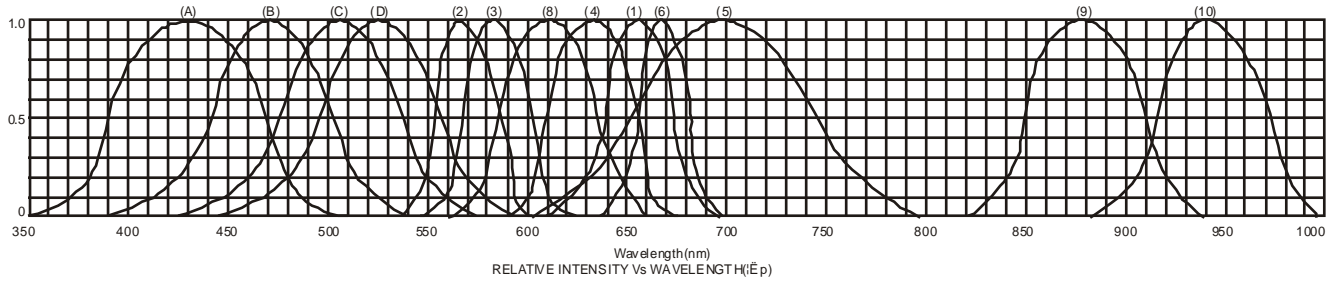
Notes:

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

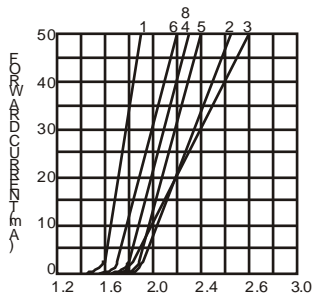
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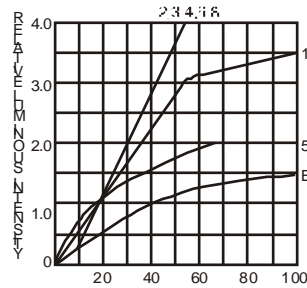
### Typical electrical-optical characteristics curves:



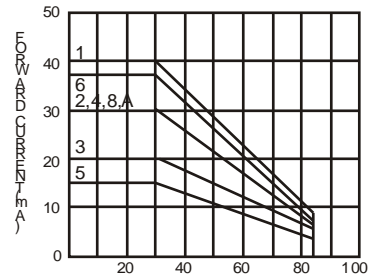
- |   |                                      |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red                | (9) - GaAlAs 880nm                   |
| (2) - GaP 570nm/Yellow Green              | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow              | (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           |                                      |



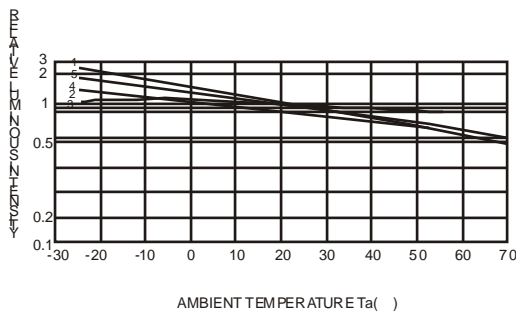
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



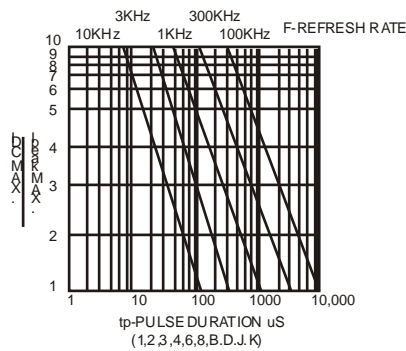
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



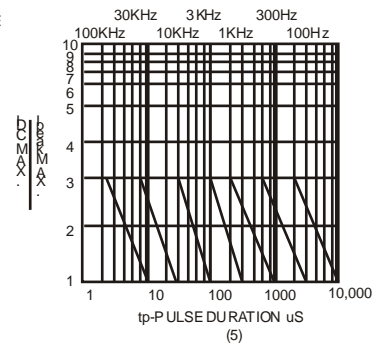
AMBIENT TEMPERATURE Ta ( )  
FORWARD CURRENT VS. AMBIENT  
TEMPERATURE



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