LED LAMP CLUSTER

BL-CS19AR2G4

Features:

- 19mm Square LED lamp cluster
- High visibility
- Emitting Color: red,green,blue
- No of Built-in 5mm LED Lamps :
- Ultra Red - 2pcs,green – 4pcs
- Waterproof Package With Hood Suitable
- For Outdoor and Indoor Information Boards





■ **Selection Guide**

Part No.	**Description**
BL-CS19AR2G4	19mm square Lamp cluster 2red ,4 green, square packed

■ **Description:**

·Color Code & 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 2θ1/2 (deg)
			Material/ Emitted Color	Peak Wave Length λp (nm)		Vf (V)		Iv (mcd)	
						Typ	Max	Typ	
BL-CS19 AR2G4	4x5x7mm 1.0" Lead Oval	L563UEC	AlGaInP/ Ultra Red	630	Water clear	2.10	2.50	750	X-X 45 Y-Y 25
		L563UGC	AlGaInP/ Ultra Green	574	Water clear	2.20	2.50	600	

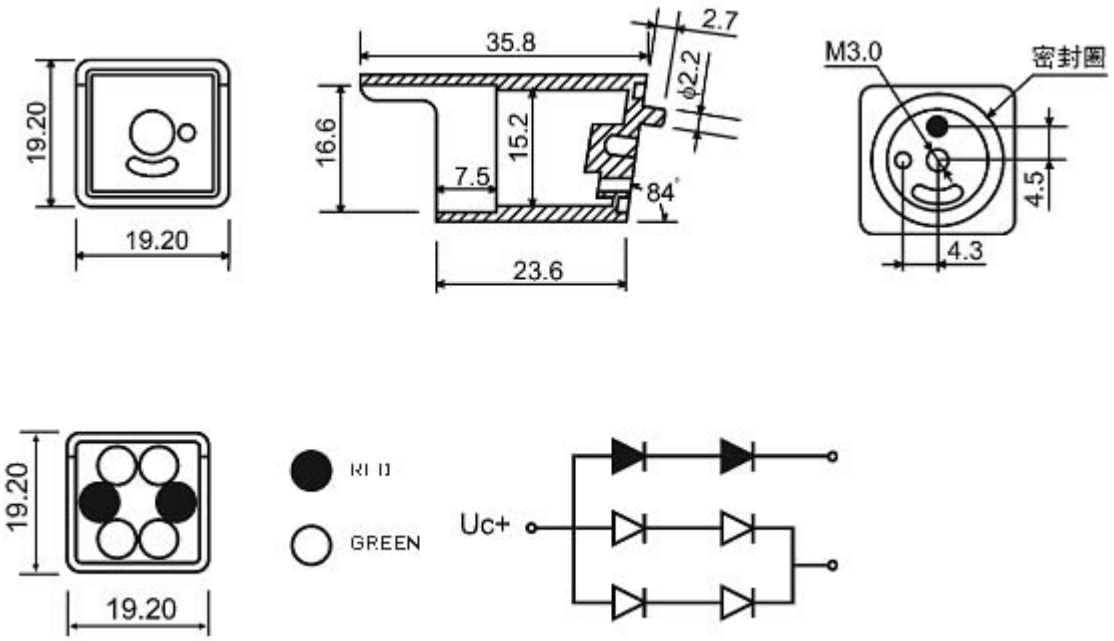
Notes:

1. θ1/2 Is the angle from optical centerline where the luminous intensity is1/2 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	△λ	17	30		nm
Pulse Forward Current	IFp	150	150		mA
DC Forward Current	IF	30	30		mA
Reverse Voltage	V_R	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)			

■ **Package configuration & Internal circuit diagram:**



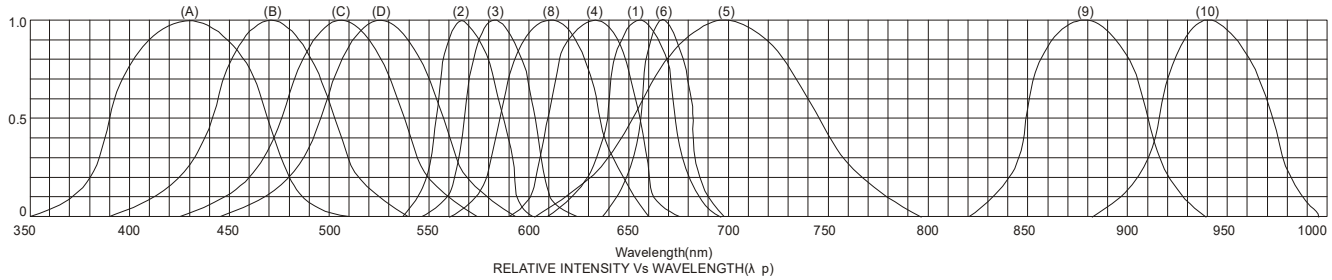
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Notes:
·All dimensions are in millimeters (inches)
·Tolerance is ±0.25(0.01")unless otherwise noted.
·Specifications are subject to change without notice.

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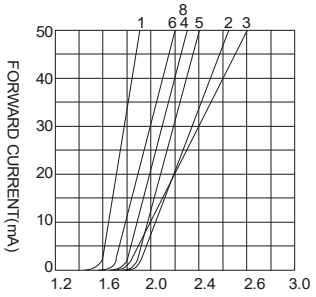
BL-CS19AR2G4

■ Typical electrical-optical characteristics curves:

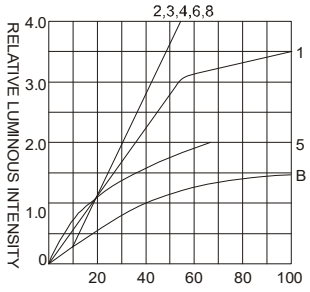


RELATIVE INTENSITY Vs WAVELENGTH(λ p)

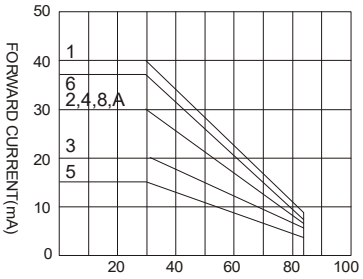
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue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



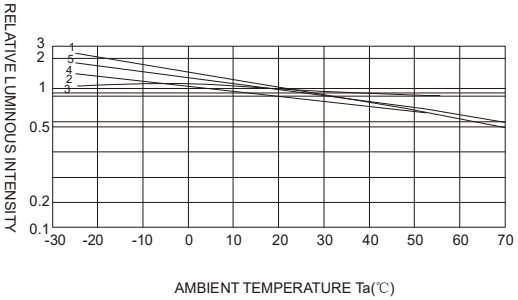
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



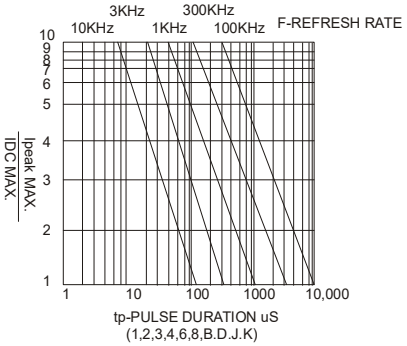
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



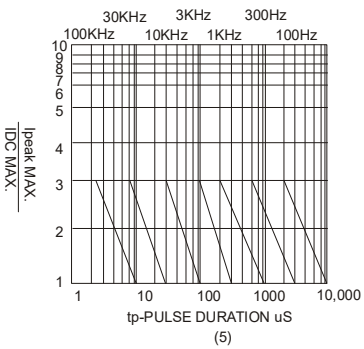
AMBIENT TEMPERATURE Ta(℃)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



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

