

High Power LED lamp

BL-HP20AxxxL

■ Features:


- 1W and 3W, 5W LEDs suitable for illumination lamps and decorative lighting
- Longer service and less luminosity loss, 50,000hours
- Different emitting colors are available
- Working current: 200-350mA, 700mA, 1050mA
- With or without heat sink are both available
- Lambertian, batwing and side emitting are all available
- Light output from 20 to 170 lumens

■ Applications:

Commercial lighting
 Residential lighting
 Decorative lighting

1Watt Lambertian

■ Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=350mA)

1W Star with Lambertian type  Part Number	Chip		Lens Type	Forward Voltage(VF) Unit:V		Flux Unit:lm @350mA		Viewing Angle 2θ/2 (deg)
	Emitted Color	λ _P (nm) or CTT		Typ	Max	Min.	Typ.	
BL-HP20AUECL	Ultra Orange	630	Water Clear	2.2	2.75	23	30	140
BL-HP20AUYCL	Ultra Yellow	590		2.2	2.75	23	30	
BL-HP20APGCL	Ultra Pure Green	525		3.2	3.8	40	55	
BL-HP20ABGCL	Ultra Bluish Green	505		3.2	3.8	40	50	
BL-HP20AUBCL	Ultra Blue	470		3.5	3.8	10	15	
BL-HP20AUWCL	Ultra White	6000k		3.5	3.8	35	40	
BL-HP20AUW2CL	Ultra Warm White	3200k		3.5	3.8	30	36	

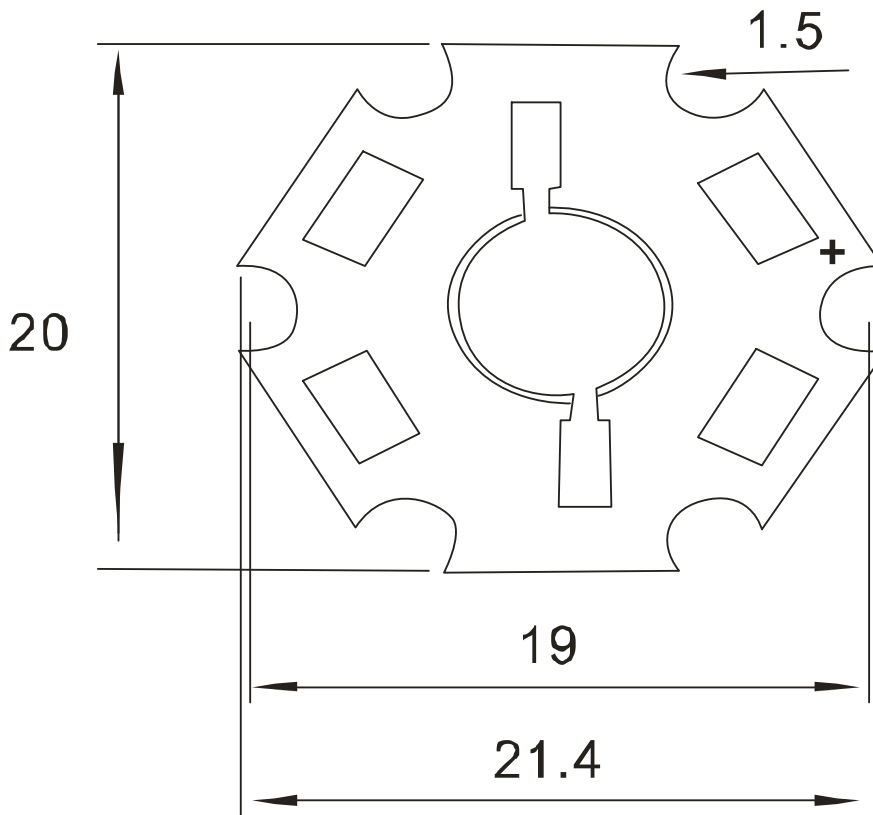
■ Absolute maximum ratings (Ta=25°C)

Parameter	UE	UY	BG	PG	UB	UW	Unit
Forward Current I _F	30	30	30	30	30	30	mA
Power Dissipation P _d	65	65	110	110	120	120	mW
Reverse Voltage V _R	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	150	150	150	150	100	100	mA
Operation Temperature T _{OPR}	-40 to +80						
Storage Temperature T _{STG}	-40 to +85						
Lead Soldering Temperature T _{SOL}	Max.260±5 for 3 sec Max. (1.6mm from the base of the epoxy bulb)						

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Package configuration & Internal circuit diagram



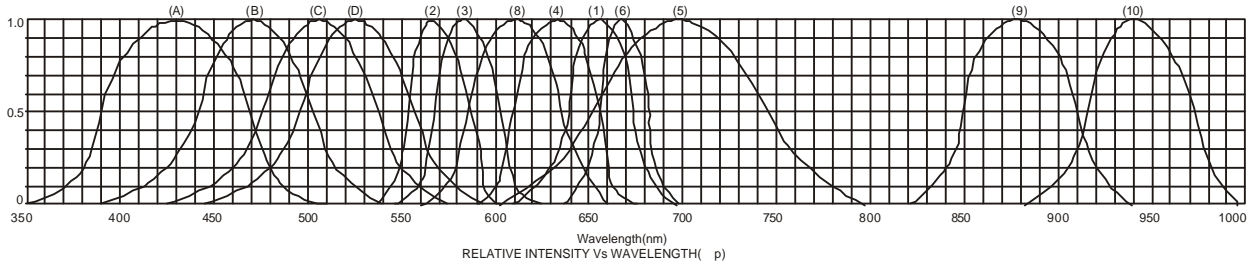
Notes:

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.

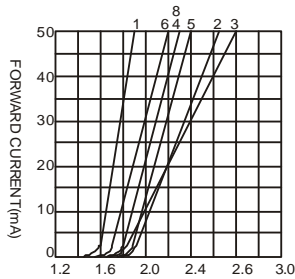
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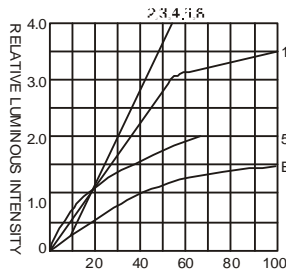
Typical electrical-optical characteristics curves:



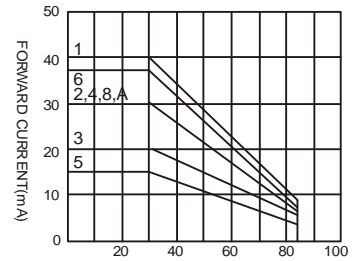
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue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



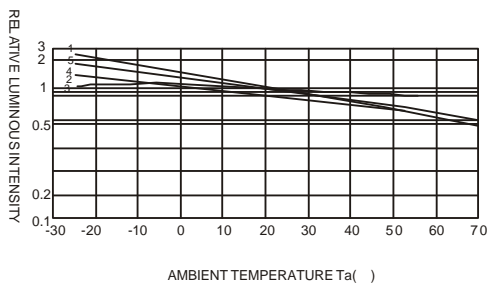
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



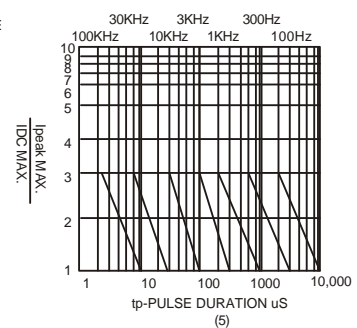
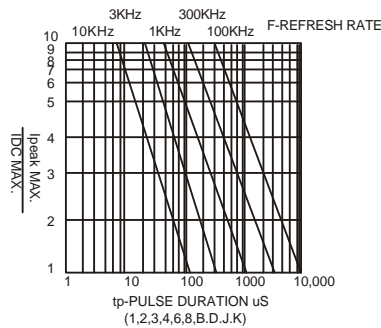
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



NOTE:25 free air temperature unless otherwise specified