

## High Power LED lamp

BL-HP20AxxxL-3W

### 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



### 3Watt Lambertian

- **Electrical-optical characteristics: (Ta=25°C)** (Test Condition: IF=750mA)

<b>3W Star with Lambertian type</b>  <b>Part Number</b>	Chip		Lens Type	Forward Voltage(VF) Unit:V		Flux Unit:lm @700mA		Viewing Angle 2θ1/2 (deg)
	Emitted Color	λ <sub>P</sub> (nm) or CTT		Typ	Max	Min.	Typ.	
<b>BL-HP20AUECL-3W</b>	Ultra Red	630	Water Clear	2.2	2.75	90	100	140
<b>BL-HP20AUYCL-3W</b>	Ultra Yellow	590		2.2	2.75	90	100	
<b>BL-HP20APGCL-3W</b>	Ultra Pure Green	525		3.5	3.8	140	150	
<b>BL-HP20ABGCL-3W</b>	Ultra Bluish Green	505		3.5	3.8	130	140	
<b>BL-HP20AUBCL-3W</b>	Ultra Blue	470		3.5	3.8	30	45	
<b>BL-HP20AUWCL-3W</b>	Ultra White	6000k		3.5	3.8	110	150	
<b>BL-HP20AUW2CL-3W</b>	Ultra Warm White	3200k		3.5	3.8	80	100	

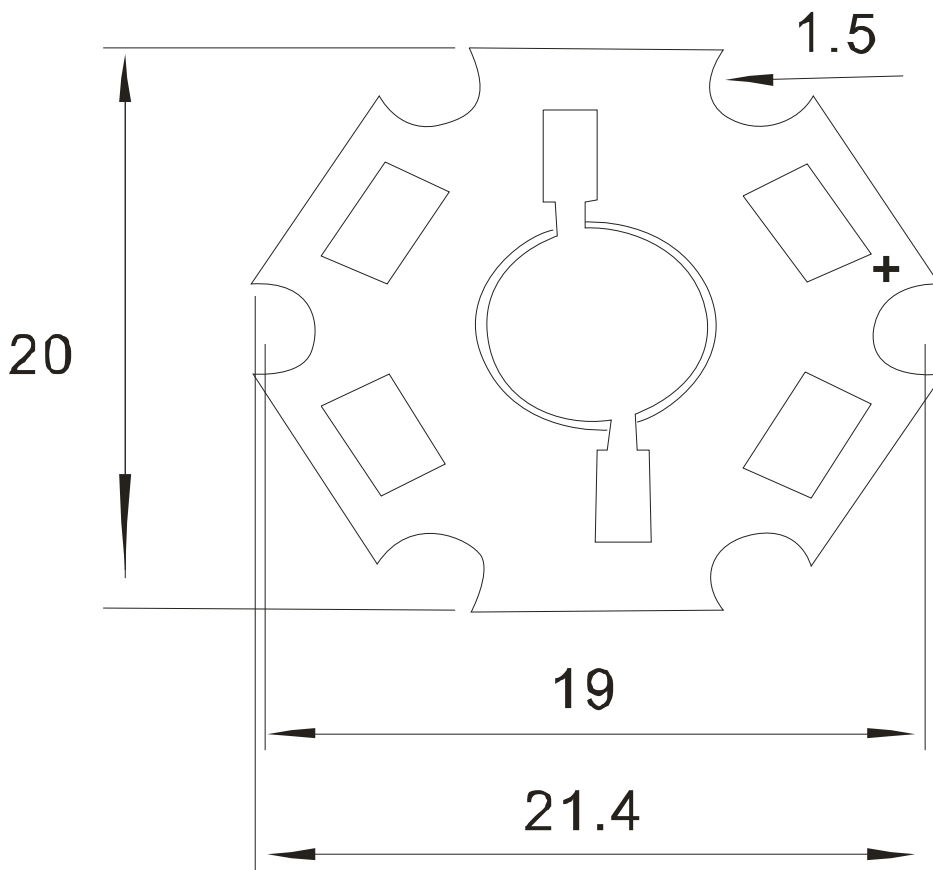
- **Absolute maximum ratings (Ta=25°C)**

Parameter	UE	UY	BG	PG	UB	UW	Unit
Forward Current I <sub>F</sub>	1200	1200	1000	1000	750	750	mA
LED Junction Temperature	120	120	120	120	120	120	°C
Peak Forward Current I <sub>PF</sub> (Duty 1/10 @1KHZ)	2000	2000	1500	1500	1500	1500	mA
Operation Temperature T <sub>OPR</sub>	-40 to +80						°C
Storage Temperature T <sub>STG</sub>	-40 to +85						°C
Aluminum-Core Pcb Temperature	105						°C

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■ **Package configuration & Internal circuit diagram**



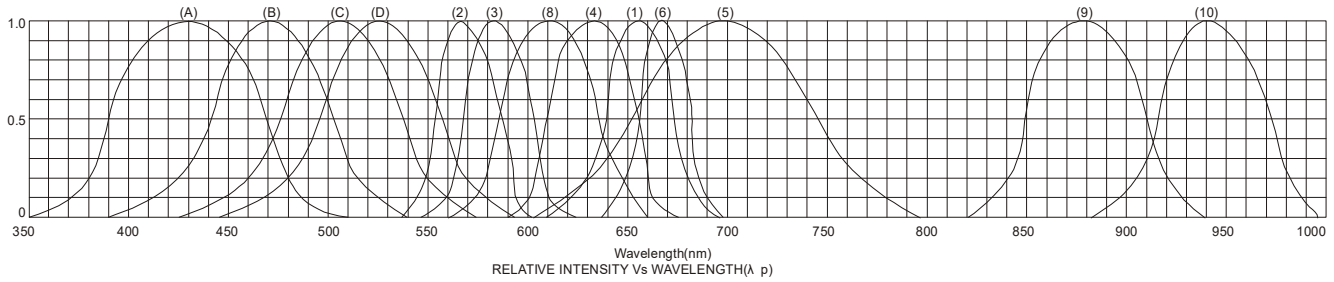
**Notes:**

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.

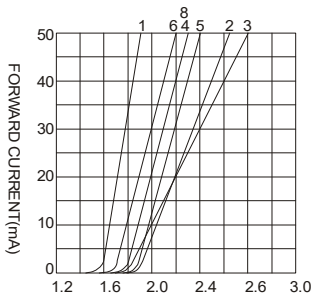
# High Power LED lamp

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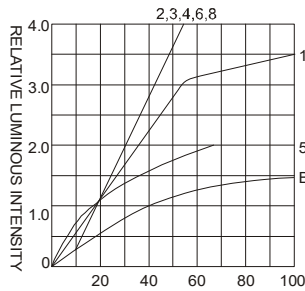
## Typical electrical-optical characteristics curves:



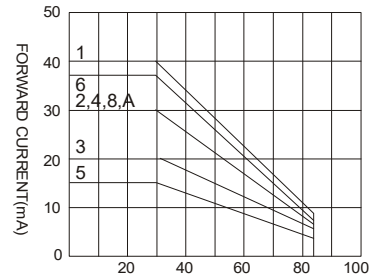
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



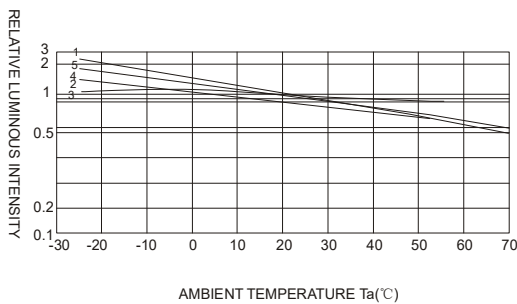
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



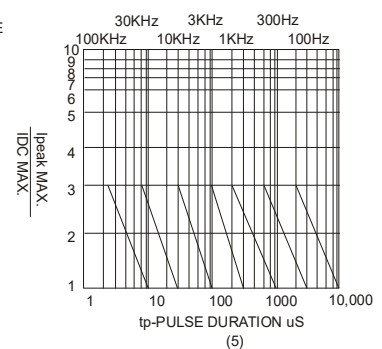
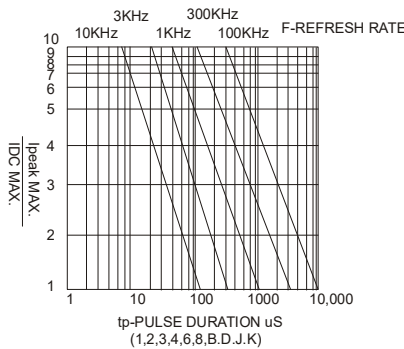
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



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



AMBIENT TEMPERATURE Ta(°C)



NOTE:25°C free air temperature unless otherwise specified

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■ **Packing and weighting**

