

High Power LED

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 n (nm) or CTT		Typ	Max	Min.	Typ.	
BL-HP20AUECL	Ultra Orange	630	Water Clear	2.2	2.75	35	45	140
BL-HP20AUYCL	Ultra Yellow	590		2.2	2.75	35	45	
BL-HP20APGCL	Ultra Pure Green	525		3.2	3.8	50	60	
BL-HP20ABGCL	Ultra Bluish Green	505		3.2	3.8	40	50	
BL-HP20AUBCL	Ultra Blue	470		3.2	3.8	10	15	
BL-HP20AUWCL	Ultra White	6000k		3.2	3.8	70	90	
BL-HP20AUW2CL	Ultra Warm White	3200k		3.2	3.8	50	70	

Absolute maximum ratings (Ta=25°C)

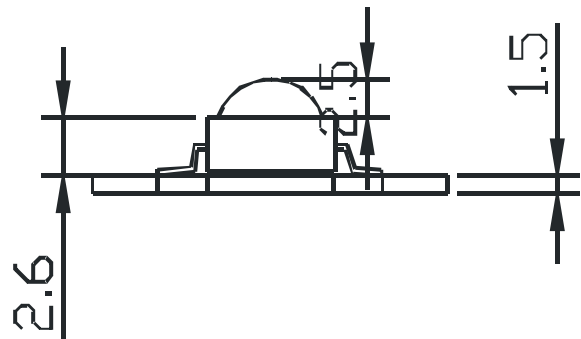
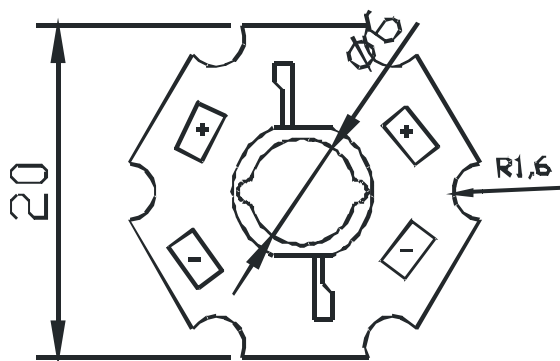
Parameter	UE	UY	BG	PG	UB	UW	Unit
Forward Current I _F	350	350	350	350	350	350	mA
LED Junction Temperature	120	120	120	120	120	120	°C
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	500	500	500	500	500	500	mA
Operation Temperature T _{OPR}	-40 to +80						°C
Storage Temperature T _{STG}	-40 to +85						°C
Aluminum-Core Pcb Temperature	105						°C

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Package configuration & Internal circuit diagram

BL-HP20A Series



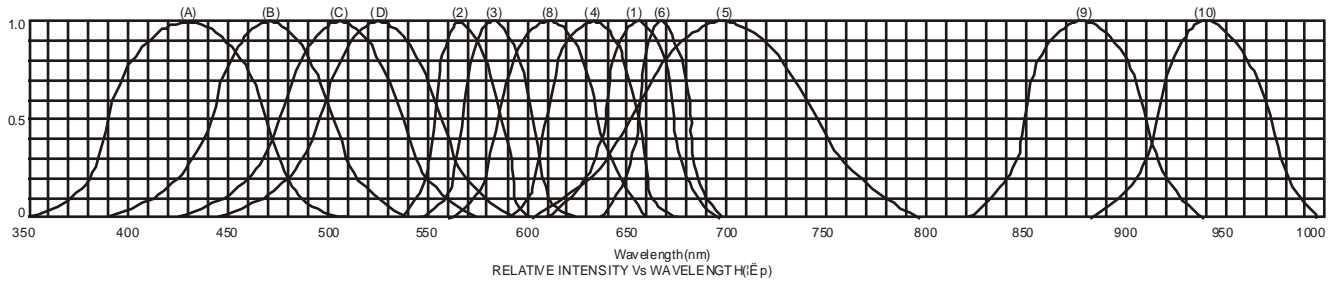
Notes:

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.

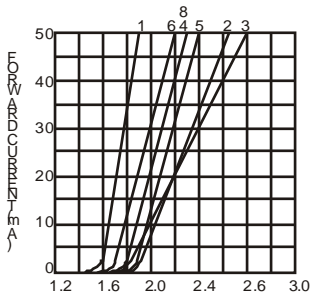
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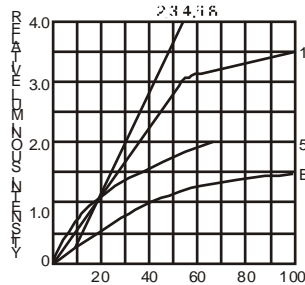
Typical electrical-optical characteristics curves:



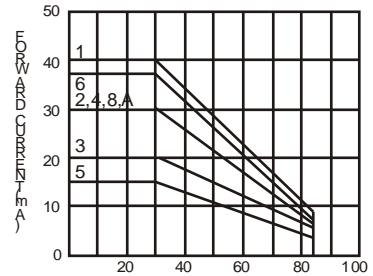
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



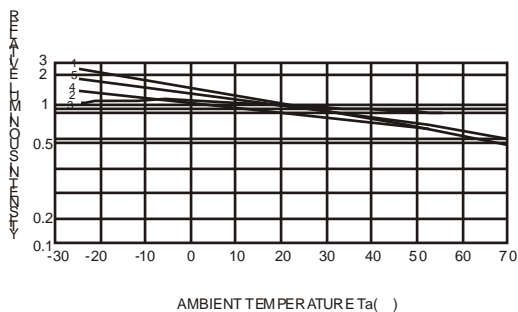
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



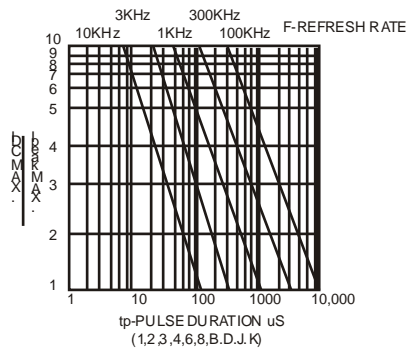
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



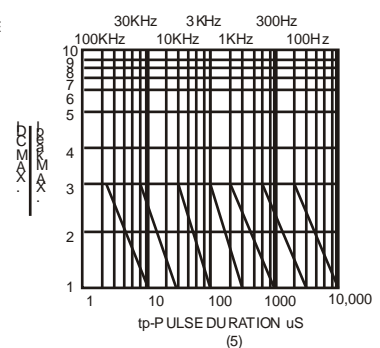
AMBIENT TEMPERATURE Ta ()
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta ()



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



(5)

NOTE: 25 free air temperature unless otherwise specified

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Packing and weighting

