High Power LED

BL-HP12EXXL

Features:

- Ø 5W LEDs suitable for illumination lamps and decorative lighting
- Ø Longer service and less luminosity loss, 50,000hours
- Ø Different emitting colors are available
- Ø With or without heat sink are both available
- Ø Lambertian, batwing and side emitting are all available

Applications:

Commercial lighting
Residential lighting
Decorative lighting





1Watt Lambertian

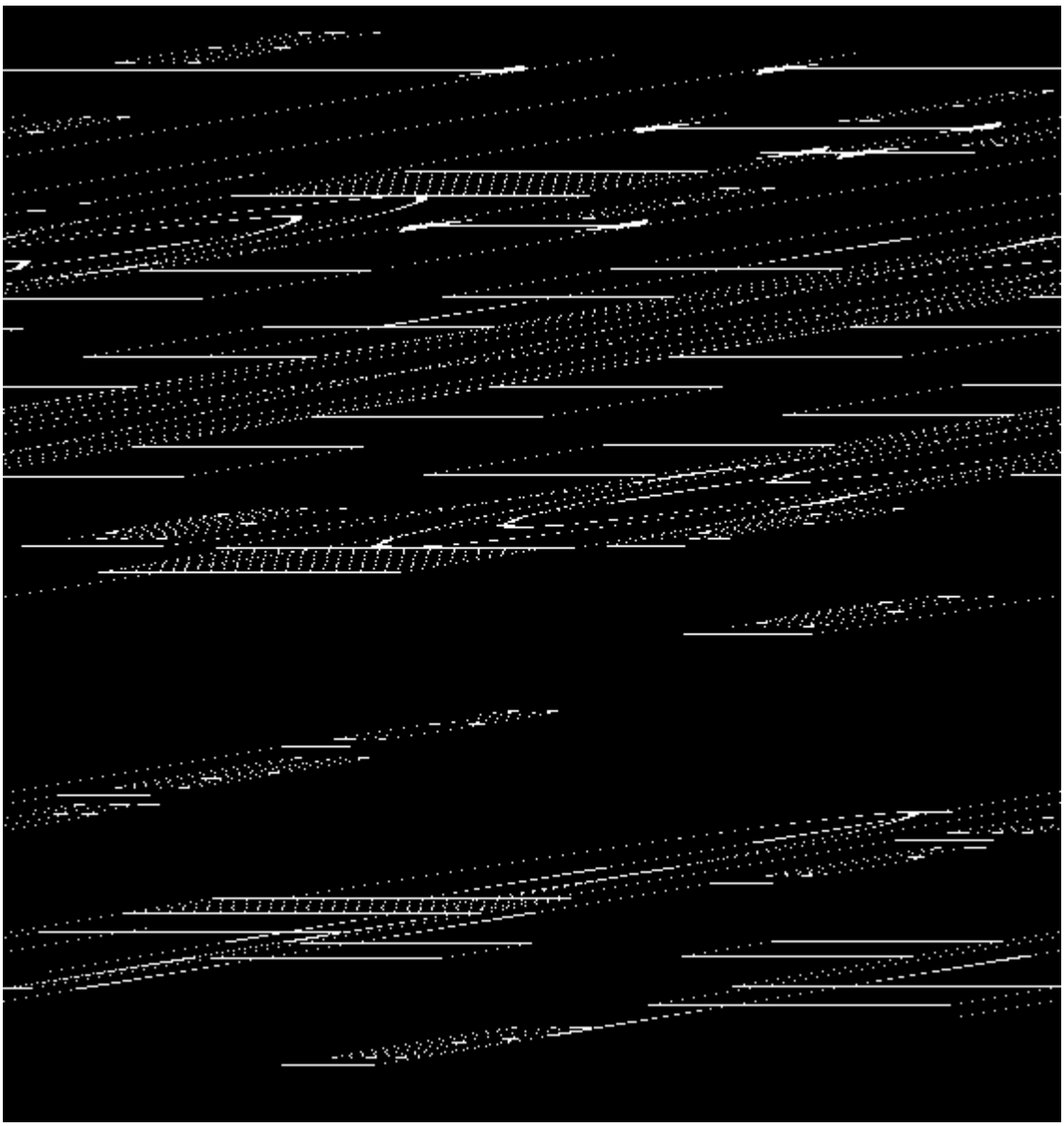
Electrical-optical characteristics: (Ta=25°C)

Part Number	Chip		Lens Type	Forward Voltage(VF) Unit:V		Flux Unit:lm		Viewing Angle 2¦È/2 (deg)
	Emitted Color	?P (nm) or CTT		Typ	Max	Min.	Typ.	
BL-HP12EUECL	Ultra Orange	630	Water Clear	2.2	2.75	150	160	100
BL-HP12EUYCL	Ultra Yellow	590		2.2	2.75	150	160	
BL-HP12EPGCL	Ultra Pure Green	525		6.4	7.6	200	250	
BL-HP12EBGCL	Ultra Bluish Green	505		6.4	7.6	180	220	
BL-HP12EUBCL	Ultra Blue	470		6.4	7.6	50	60	
BL-HP12EUWCL	Ultra White	6000k		6.4	7.6	250	300	
BL-HP12EUW2CL	Ultra Warm White	3200k		6.4	7.6	150	200	

Absolute maximum ratings (Ta=25°C)

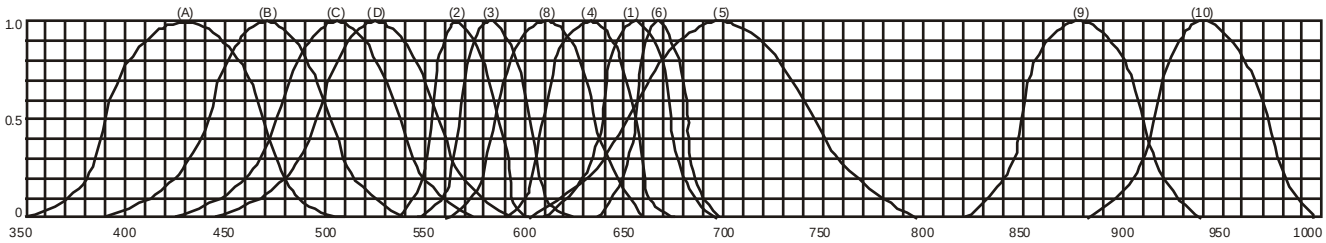
Parameter	UE	UY	BG	PG	UB	UW	Unit
Forward Current I_F	1800	1800	800	800	800	800	mA
LED Junction Temperature	120	120	120	120	120	120	°C
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	3000	3000	1500	1500	1500	1500	mA
Operation Temperature T_{OPR}	-40 to +80						°C
Storage Temperature T_{STG}	-40 to +100						°C
Aluminum-Core Pcb Temperature	105						°C

■ Package configuration & Internal circuit diagram



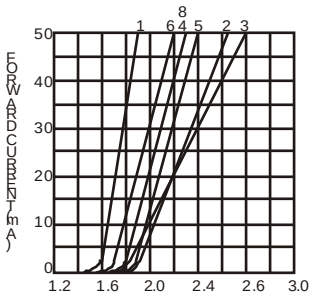
Notes:
1. All dimensions are in millimeters (inches)
2. Tolerance is 0.25(0.01")unless otherwise noted.
3. Specifications are subject to change without notice.

Typical electrical-optical characteristics curves:

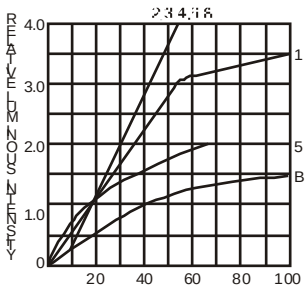


RELATIVE INTENSITY Vs WAVELENGTH(λp)

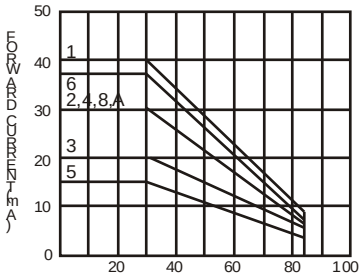
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue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



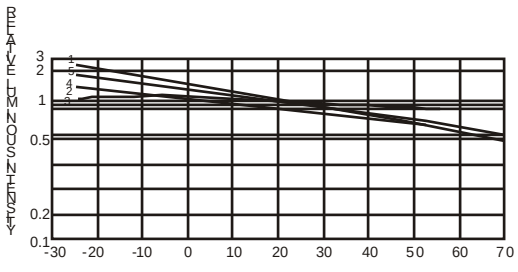
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



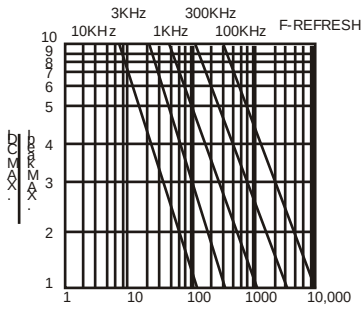
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



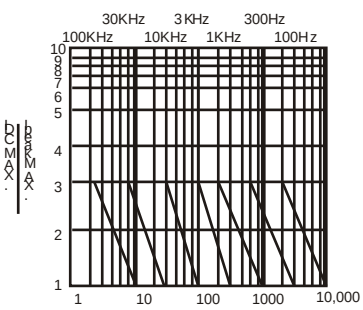
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



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



tp-PULSE DURATION uS
(5)

NOTE:25°C free air temperature unless otherwise specified

Packing and weighting

