

# HIGH POWER

# FYLP- 0.5W-UW

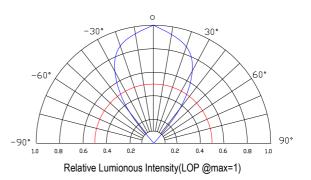
## **Features:**

- Long operating life
- Highest flux
- Available in White
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam,safe to the touch
- Instant light (less than 100ns)
- Fully dimmable
- No UV
- Superior ESD protection
- Eutectic die band, lower Rth.
- ROHS compliant Lead-free
- Instant light (less than 100ns)

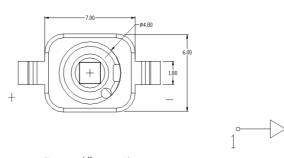
#### **Applications**

- Reading lights (car,bus,aircraft)
- Portable(flashlight,bicycle).
- orientation
- Mini-accent
- Decorative
- Fiber optic alternative
- Appliance
- Sign and channel letter
- Architectural detail
- Cove lighting
- Automotive exterior ( stop-Tail-turn,CHMSL,Mirror side repeat)
- Edge-lit signs(Exit,point of sale)

#### **Radiation Pattern**



### **Package Dimensions**



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ltem	symbol	Condition	Min	Тур	Max	Unit
Forward Voltage	VF	IF=150mA	3.0	-	3.6	V
Reverse Current	IR	VR=5V			50	uA
50% Power Angle	20 <sub>1/2</sub>	IF=150mA	65	70	75	deg
Luminous Intensity	Φν	IF=150mA	20	25		LM
Recommend Forward Current	IF			150		mA
Chromaticiyt	Х	IF=150mA		0.30		
coordinates	Y			0.30		
Thermal Resistance, Junction to Case	Rjp	IF=150mA		10		°C/W

#### ■ Typical Optical/Electrical Characteristics@TJ=25°C

Notes: 1. Tolerance of measurement of forward voltage  $\pm$  0. 1v

- 2. Tolerance of measurement of peak Wavelength  $\pm 2.0$  nm
- 3. Tolerance of measurement of luminous intensity  $\pm 15\%$ .

Item	symbol	Absolute Maximum Rating	Unit		
Forward Current	IF	150	mA		
Peak Forward Current*	IFD	300	mA		
Reverse Voltage	VR	5	V		
Power Dissipation	PD	500	mW		
Electrostatic discharge	ESD	± 4500	V		
Operation Temperature	Topr	-30℃ to +80℃	-30℃ to +80℃		
Storage Temperature	Tstg	-40 ℃ to +100 ℃			
Lead Soldering Temperature*	Tsol	$260^\circ\!\mathrm{C}$ for 3 Seconds Max			

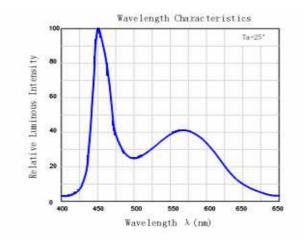
### Absolute Maximum Rating

- IFP Conditions :Pulse Width  $\leq 10 \text{ msec } duty \leq 1/10$
- All high Power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly ,but we do not recommend lighting the high power products for more than 5 seconds without a directly,but we do not recommend lighting the high powe products for more than 5 seconds without a appropriate heat dissipation equipment.
- Re-flow, wave peak and soak-stannum soldering etc. is not suitable for this products.
- Sueggest to solder it by professional high power LED soldering machine.
- Can use invariable temperature searing-iron with soldering condition:  $\leq 260$  degreen less than 3 seconds.



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### Typical optical/Electrical Characteristics Curves (Tj=25 $^{\circ}$ C Unless Otherwise Noted)



Relative Luminous Intensity - IF π., Ta-25 4.0 Relative Luminous Intensity 1.0 2.0 £.0 0 350 400 500 600 Forward Current Ir(mA)  $I_F = V_F$ Ta=25\* 606 Forward Current Ir(mA) 300

400

300

200.0

1.6

2.2

2.8

Forward Voltage Vr(V)

3.4

4.0

4.6

Allowable Forward Current - Ta

