



American Opto Plus LED PU-FL0109-WC

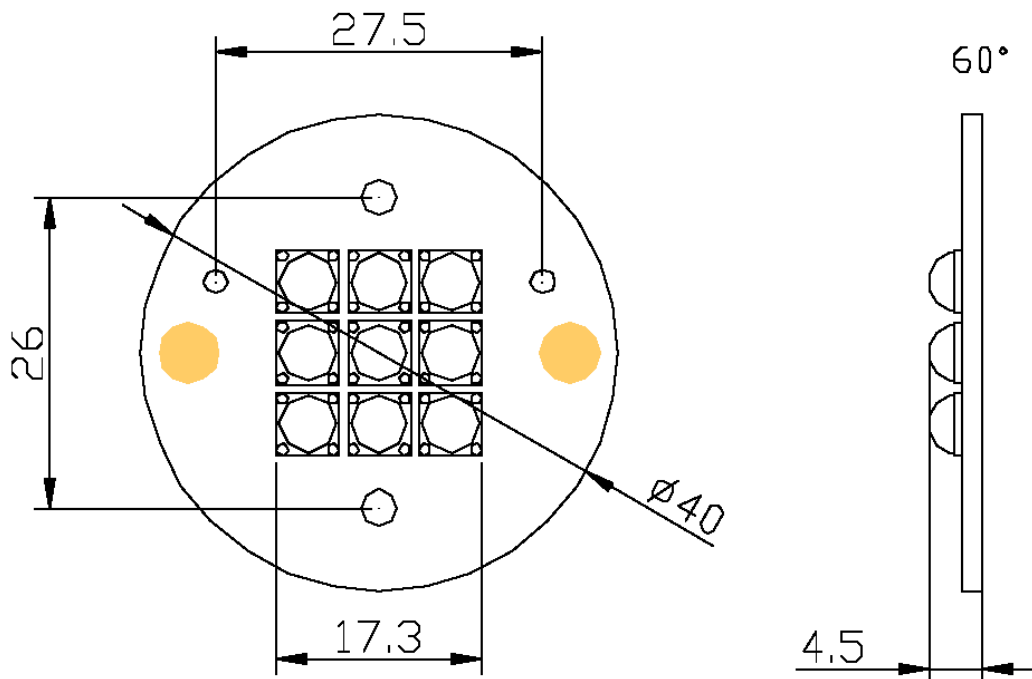
Power UFO LED – 1050mA Lighting Application

- ❖ High Power, High Output
- ❖ 1050mA Drive Current w/ Proper Heat Sink
- ❖ 12 Watt, 60deg Viewing Angle

Package Dimensions



Mechanical Dimensions



Tolerance: $\pm \frac{0.01}{0.25}$

Unit: $\pm \frac{\text{inch}}{\text{mm}}$



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Features

- Single circuit
- High Light Output
- High Driving Current
- Long Operation Life
- Available in White and Blue
- Low Voltage DC Operated
- Instant Light (Less than 100ns)
- No UV
- More Energy Efficient than Incandescent and most Halogen Lamps
- Flip Chip Technology

Applications

- Reading Lights
- Portable
- Interior and Exterior Automotive Light
- Signal and Symbol Luminaries for Orientation
- Maker Lights
- Task and Accent Lighting
- Architectural Detail Lighting
- Edge-lit Signs (Exit, Point of Sale)

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	12	W
Reverse Voltage	V _R	5	V
Reverse Current	uA	100	uA
Average Forward Current	I _F	1050	mA
Peak Forward Current (Duty = 0.1, 1KHz)	I _{PF}	1500	mA
Operating Temperature Range	T _{opr}	-40 ~ +80	°C
Storage Temperature Range	T _{stg}	-40 ~ +100	°C
Dice Temperature	T _j	120	°C

Note: Products are sensitive to static electricity and care must be fully taken when handling.



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Electrical / Flux Characteristics at Tc = 25°C

Part Number	Chip Material	Lens Color	Color Temperature (K) CCT	Forward Voltage @ 1050mA (V)		Luminous Flux @ 1050mA (lm)		View Angle 2θ ½ (deg) Δθ
				Typ.	Max.	Min.	Typ.	
PU-FL0109WC	InGaN / Sapphire	Water Clear	5500	11	12	-	200	60

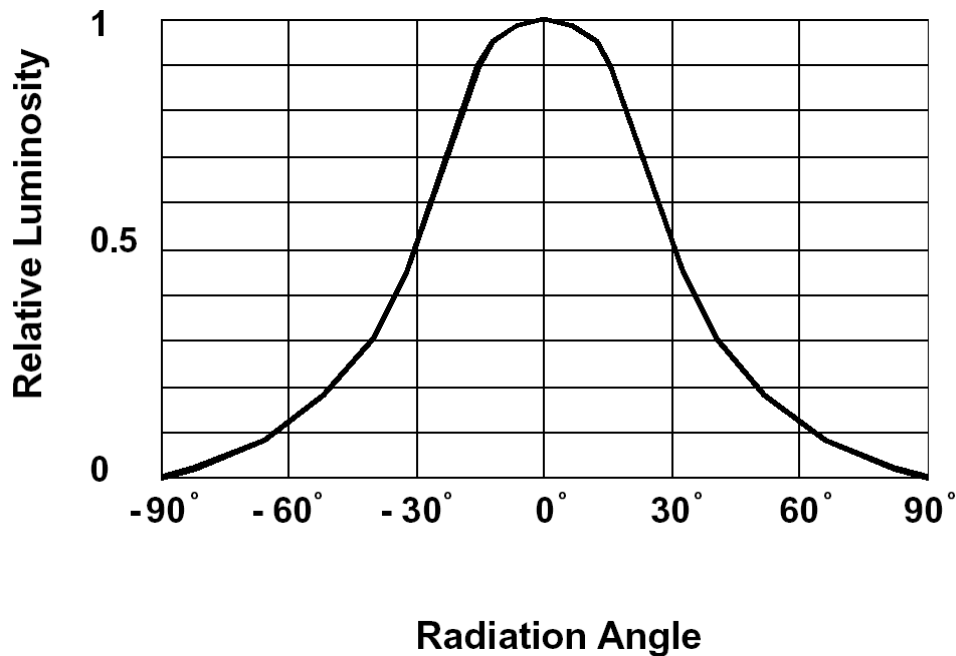
Notes:

Forward Voltage measurement allowance is $\pm 3\%$

Luminous Flux measurement allowance is $\pm 10\%$

Color Temperature measurement allowance is ± 100

Radiation Pattern



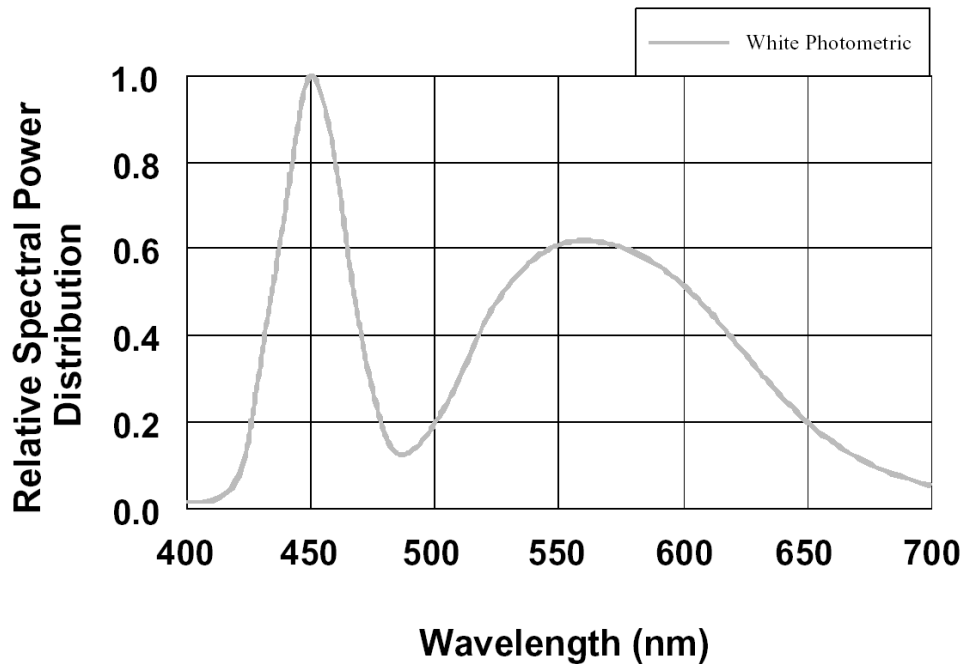


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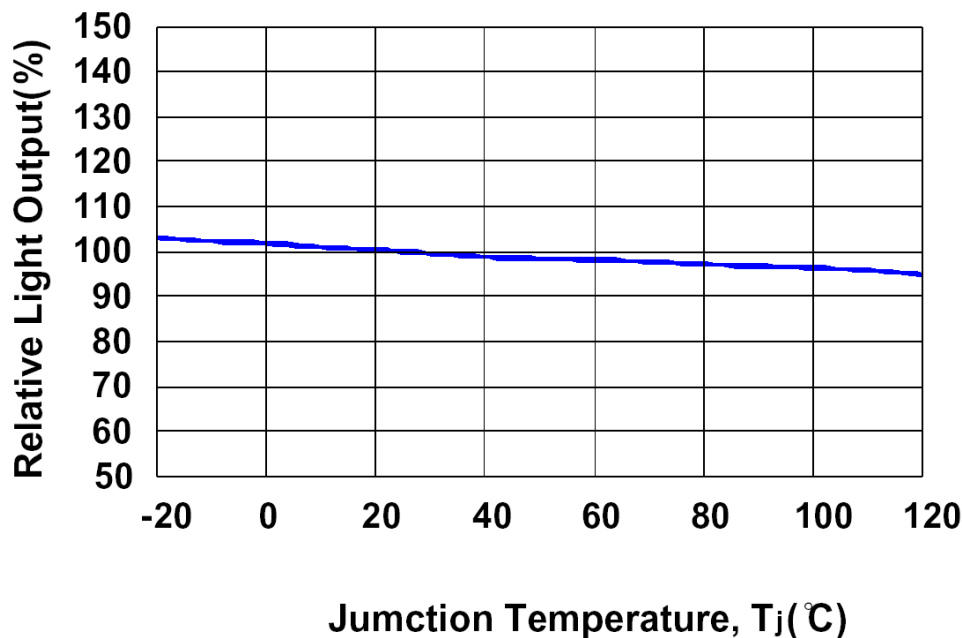
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Wavelength Characteristics ($T_j = 25^\circ\text{C}$)



Light Output Characteristics



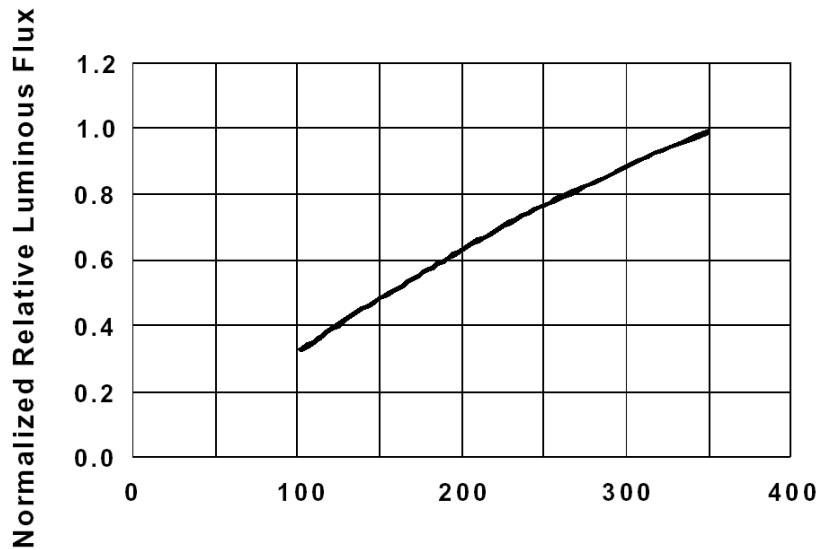


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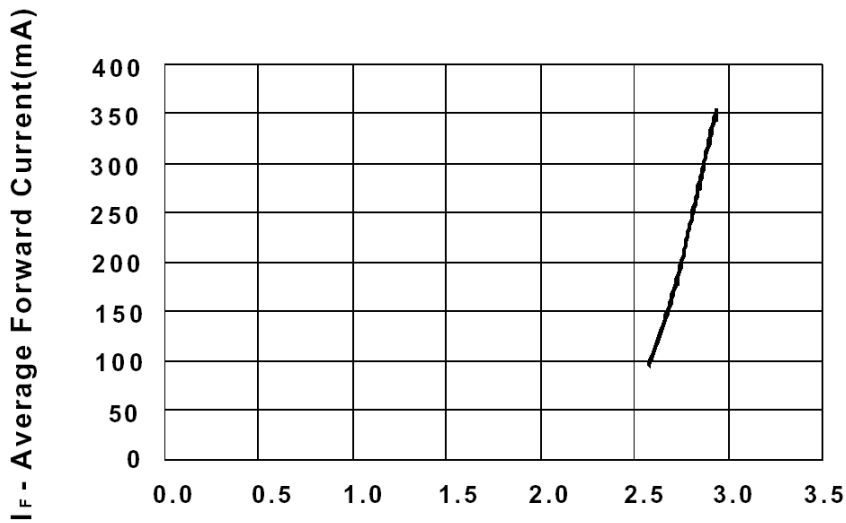
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Forward Current Characteristics (T_j = 25°C)



I_F - Average Forward Current(mA)

Relative Luminous FLux vs. Forward Current



V_F - Forward Voltage(Volts)

Forward Current vs. Forward Voltage