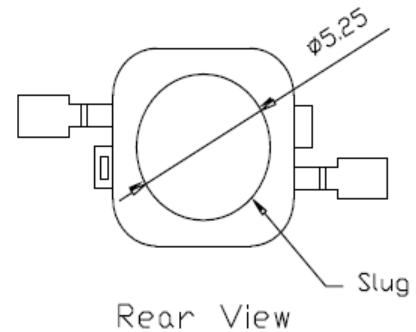
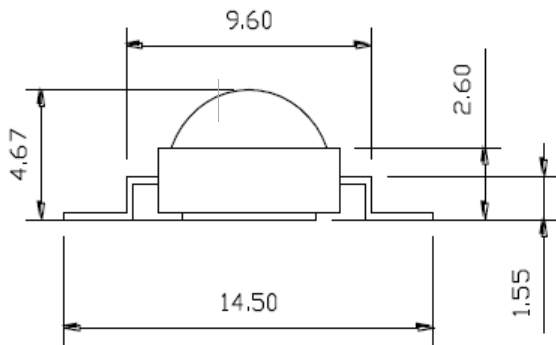
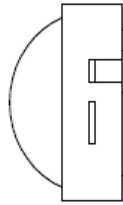
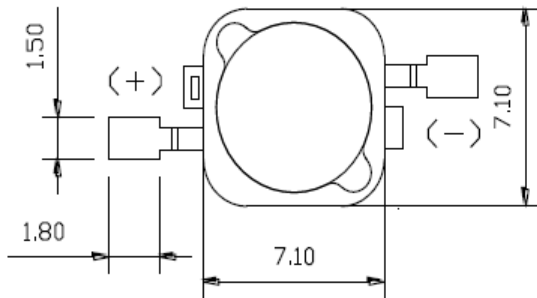
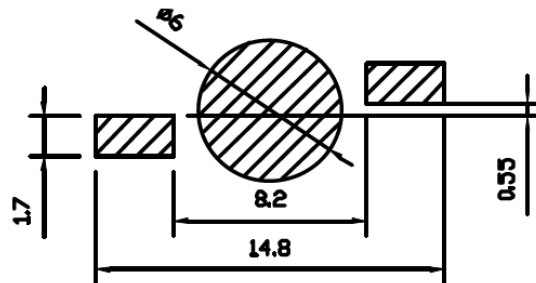


## ■ Package Dimension:



## Recommended Soldering Pad



Part NO.	Chip	Emitting Color	Lens Color
AL-01K5UV3WC-1A2	InGaN	UV	Water Clear

## Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. This data-sheet only valid for six months.

**■ Absolute Maximum Ratings at Ta=25°C**

Parameter	Symbol	MAX.	Unit
DC Forward Current	I <sub>F</sub>	700	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	2.48	W
Pulse Forward Current	I <sub>FP</sub>	1000	mA
LED junction Temperature (at 350mA)	T <sub>j</sub>	125	°C
Thermal Resistance	R <sub>th</sub>	10	K/W
Operating Temperature Range	Topr	-40°C to +100	°C
Storage Temperature Range	Tstg	-40°C to +100	°C
Manual Soldering Time at 260°C (Max.)	Tsol	5	seconds

**Notes:**

1. Maximum DC forward current is determined by the overall thermal resistance and ambient temperature.
2. I<sub>FP</sub> conditions: pulse width  $\leq 1\text{ms}$  and duty cycle  $\leq 10\%$ .

## ■ Electrical Optical Characteristics at Ta=25°C

Parameter	BIN	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Power Consumption	S9	Radiometric Power	580	---	620	mW	I <sub>F</sub> =500mA
	S10		620	---	660		
	S11		660	---	700		
	S12		700	---	740		
	S13		740	---	780		
Forward Voltage		V <sub>F</sub>	3	---	4	V	I <sub>F</sub> =500mA
Peak Wavelength		λ <sub>p</sub>	380	---	390	nm	I <sub>F</sub> =500mA
Spectra Half Widh		Δλ	12	---	25	nm	I <sub>F</sub> =500mA
Reverse Current		I <sub>R</sub>	---	---	2	μA	I <sub>F</sub> =500mA
Emission Angle		2θ <sub>1/2</sub>	---	120	---	Deg	I <sub>F</sub> =500mA

### Notes:

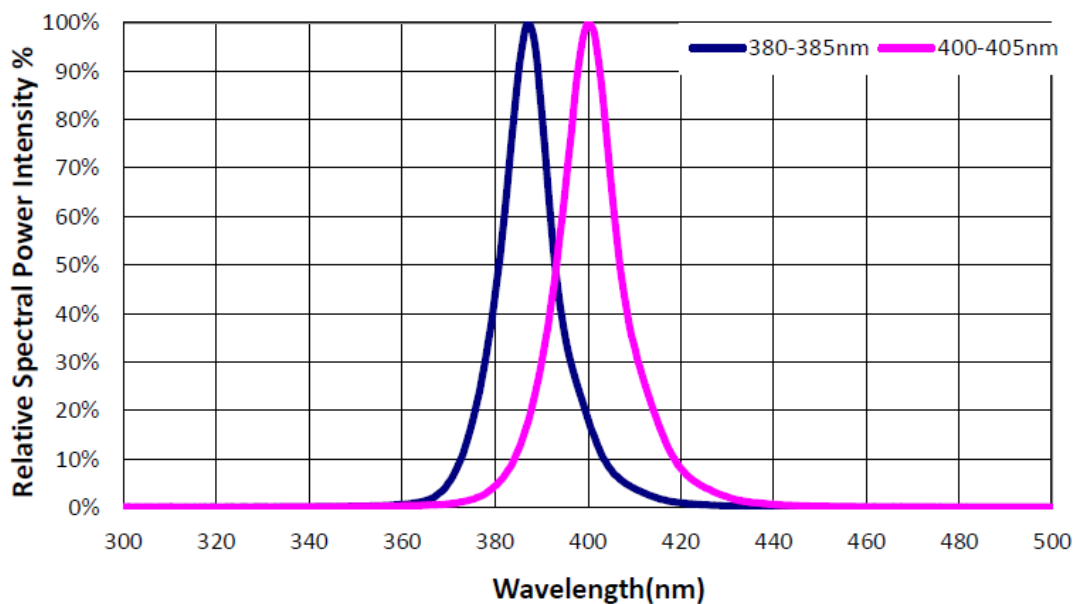
1. Ranking at Ts=25°C.
2. Forward Voltage Tolerance: ±0.05V.
3. Radiometric Power Tolerance: ±10%.
4. Peak Wavelength Tolerance: ±2nm.
5. LEDs from the above ranks will be shipped.

**■ Forward Voltage Binning**

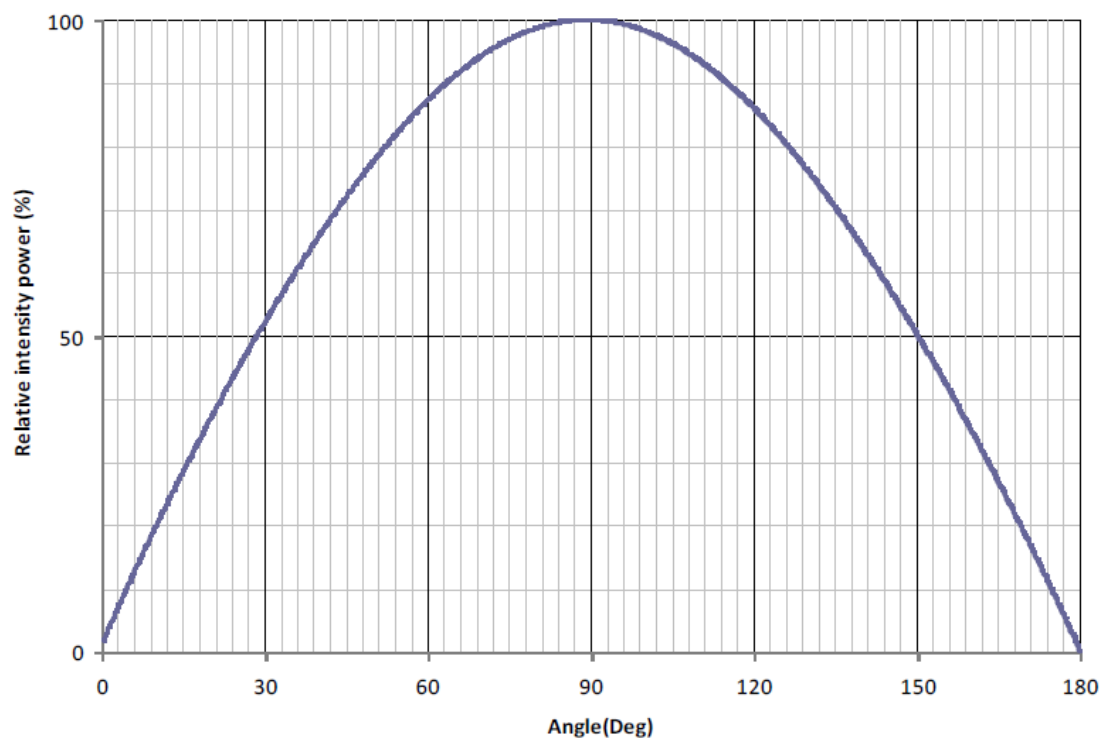
Part number	Forward Voltage at Test Current (500mA)		
	Vf Group	Minimum Voltage (V)	Maximum Voltage (V)
	V30	3.0	3.2
	V32	3.2	3.4
	V34	3.4	3.6
	V36	3.6	3.8
	V38	3.8	4.0

## ■ Characteristics Curves $T_J=25^{\circ}\text{C}$

### RELATIVE SPECTRAL POWER DISTRIBUTION

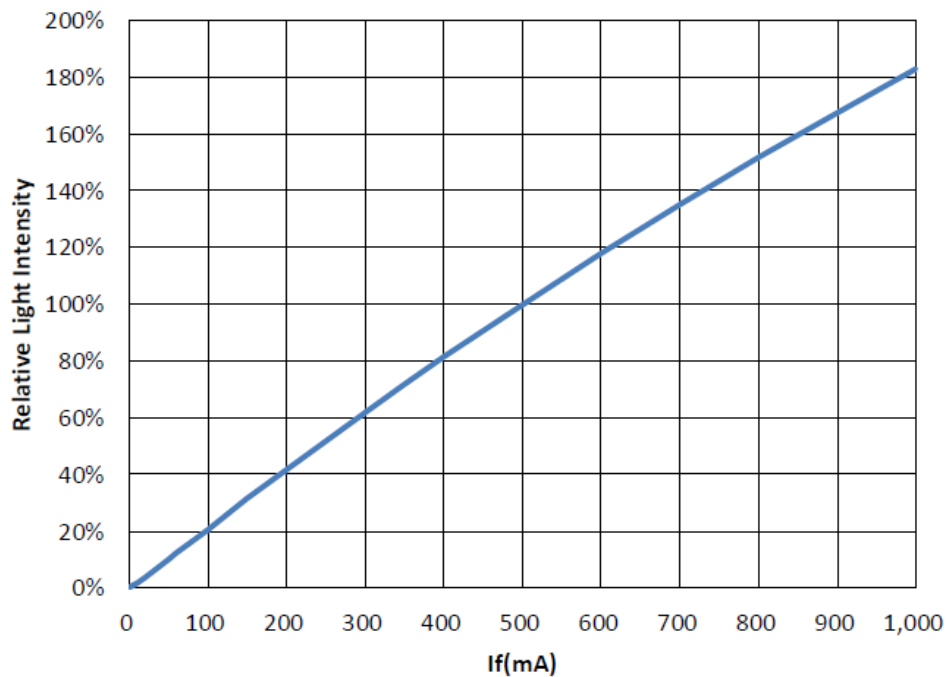


### SPATIAL DISTRIBUTION

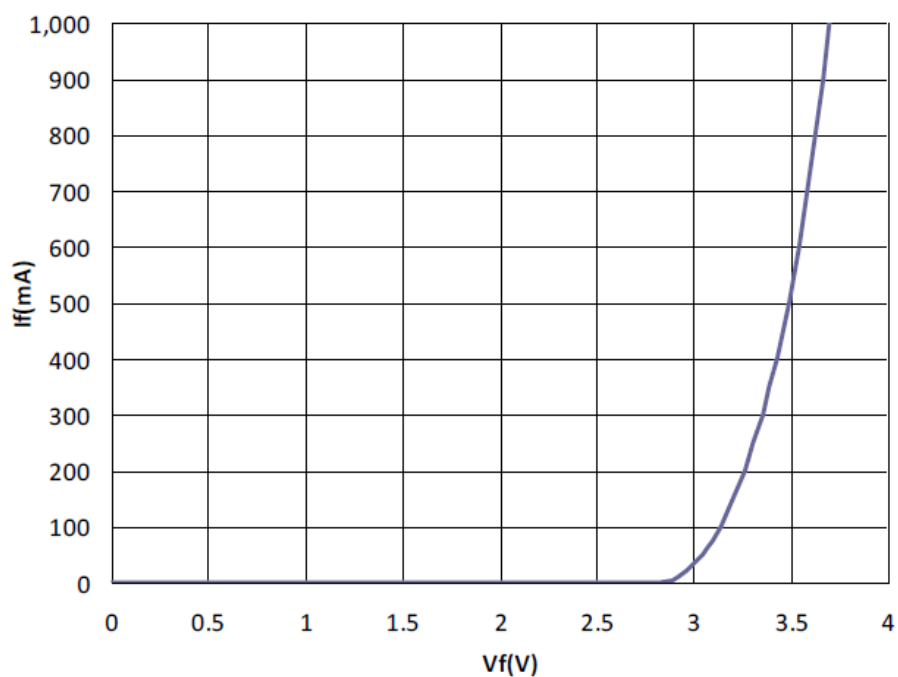


■ **Characteristics Curves**  $T_J=25^{\circ}\text{C}$

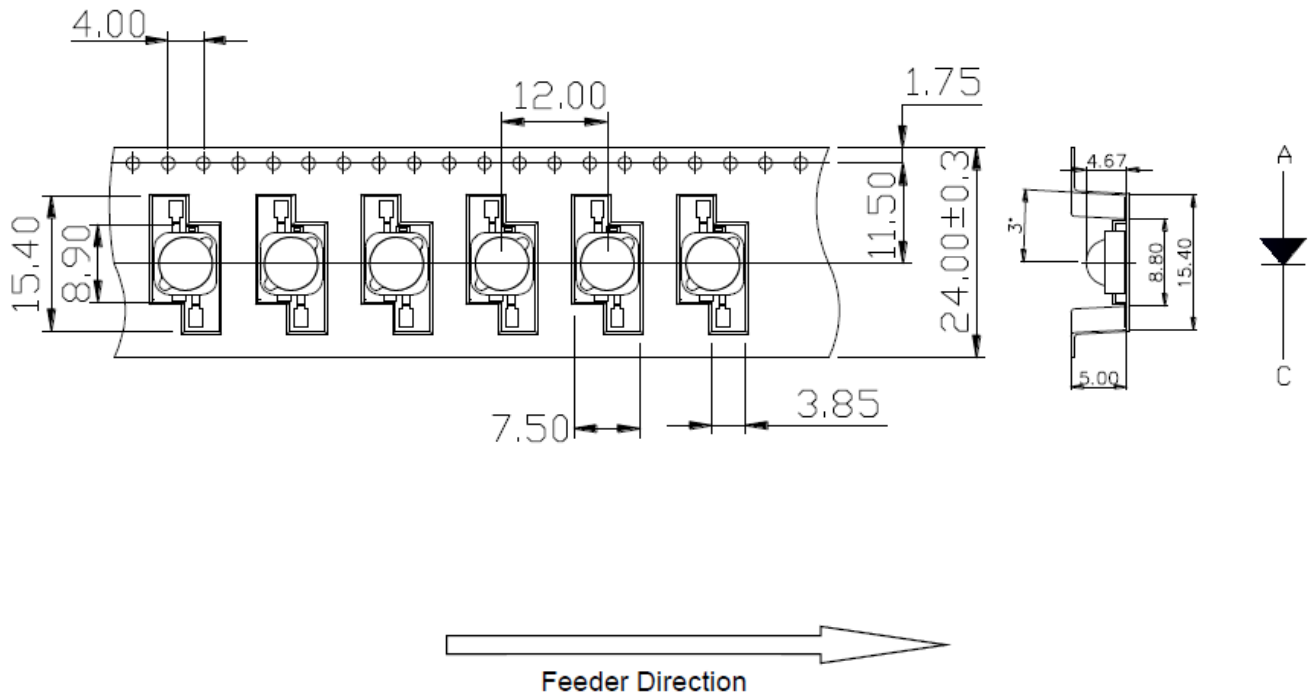
**TYPICAL FORWARD L-I CHARACTERISTICS**



**TYPICAL FORWARD I-V CHARACTERISTICS**



**TAPE AND REEL**



Notes:

1. All dimensions are in millimeter.
2. Tolerance is ±0.10mm unless otherwise noted.