

■ Description

This revolutionary package design allows the lighting designer to reduce the number of LED required and provide a more uniform and unique illuminated appearance than with other LED solutions.

This is possible through the efficient optical package design and high-current capabilities.

■ Features

- High Flux Output.
- Low Thermal Resistance.
- Low Profile.
- The product itself will remain within RoHS Compliant version.

■ Applications

- Indicator.
- General use.

■ Absolute Maximum Ratings (at Ta=25°C)

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	P_D	60	mW
Forward Current	I_F	25	mA
Peak Forward Current (Pulse width $\leq 100 \mu S$ duty $\leq 1/10$)	I_{FP}	60	mA
Reverse Voltage	V_R	5	V
Operation Temperature	T_{opr}	-25 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Electrostatic Discharge	ESD	2000	V
Lead Soldering Temperature (2mm from the case $t \leq 5S$)	T_{sol}	260	°C

■ Basic Characteristics

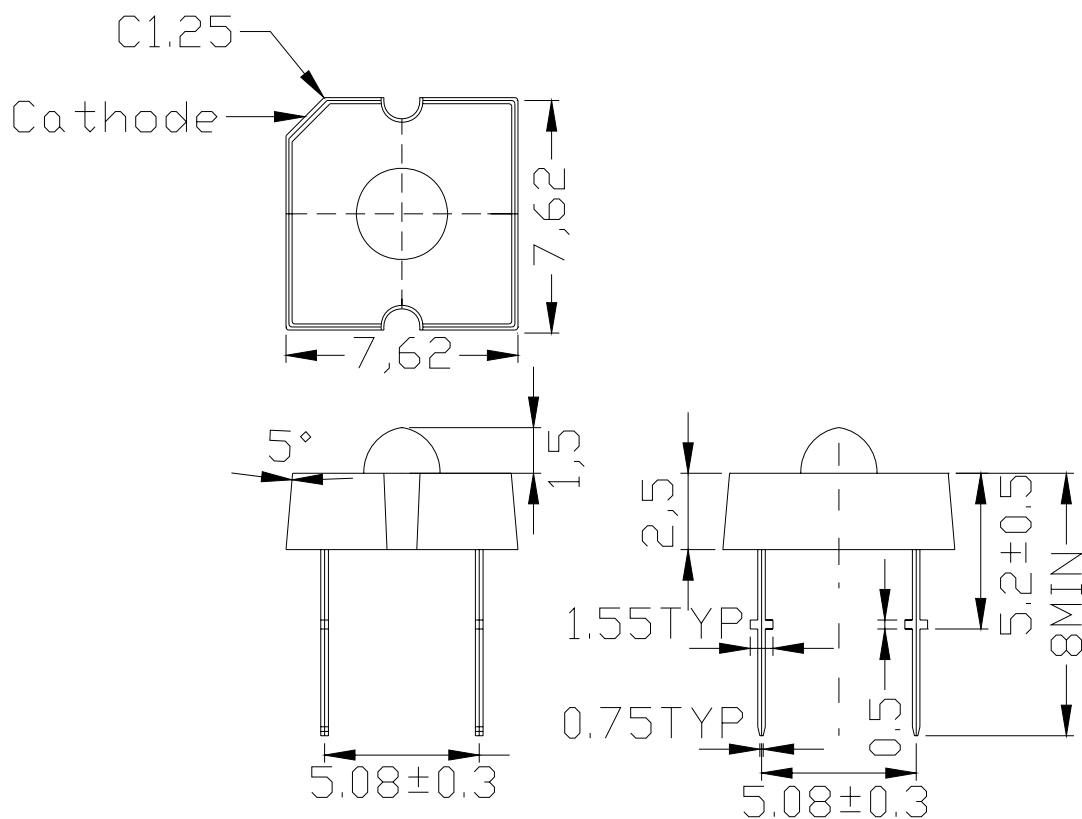
Piranha Type High Power Led

LK30-01SURC

 $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	--	2.0	2.4	V
Reverse Current	I_R	$V_R=5\text{V}$	--	--	10	μA
Dominant Wavelength	λ_D	$I_F=20\text{mA}$	--	624	--	nm
Peak Wavelength	λ_P	$I_F=20\text{mA}$	--	630	--	nm
Spectral Bandwidth	$\Delta\lambda$	$I_F=20\text{mA}$	--	20	--	nm
Luminous Intensity	I_V	$I_F=20\text{mA}$		1300	--	mcd
50% View Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	--	60	--	deg

Package Dimensions



Notes: without special declared, the tolerance is +/-0.25mm

■ Typical Electrical / Optical / Characteristics Curves

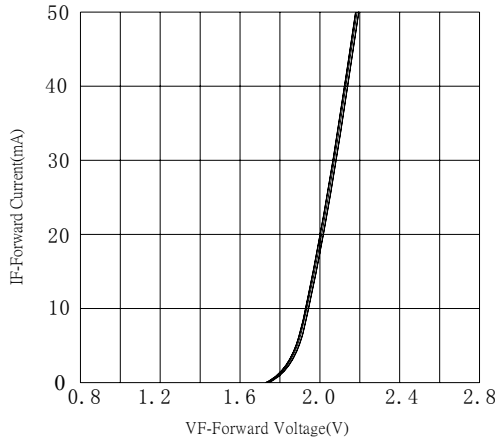


Fig.1 Forward Current vs.Forward Voltage

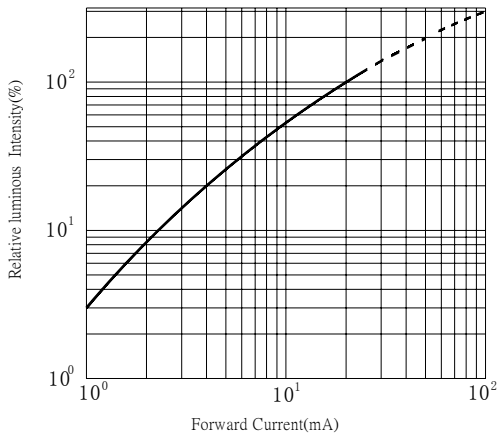
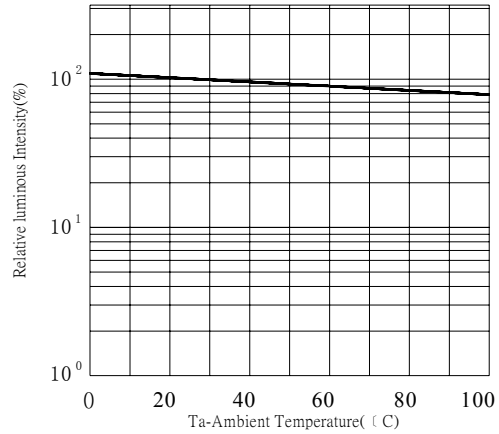


Fig.3 Relative luminous Intensity vs.Forward Current

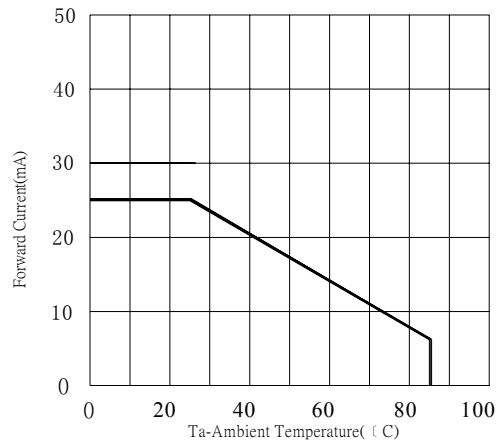


Fig.4 Forward Current vs.Ambient Temperature

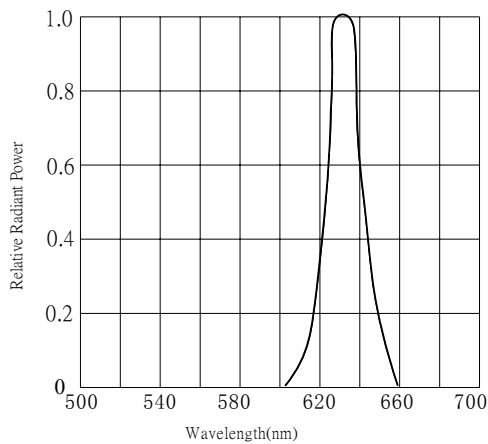


Fig.5 Relative Radiant Power vs.Wavelength

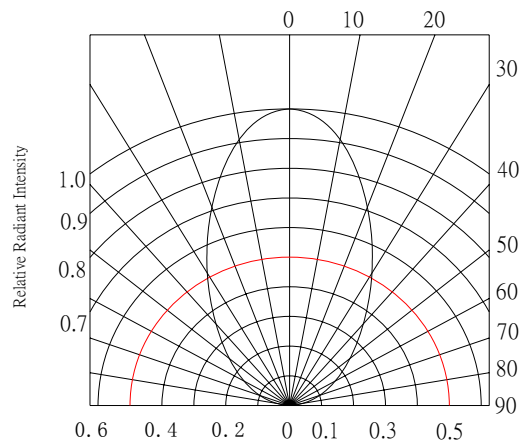


Fig.6 Relative Radiant Intensity vs.Angular Displacement