

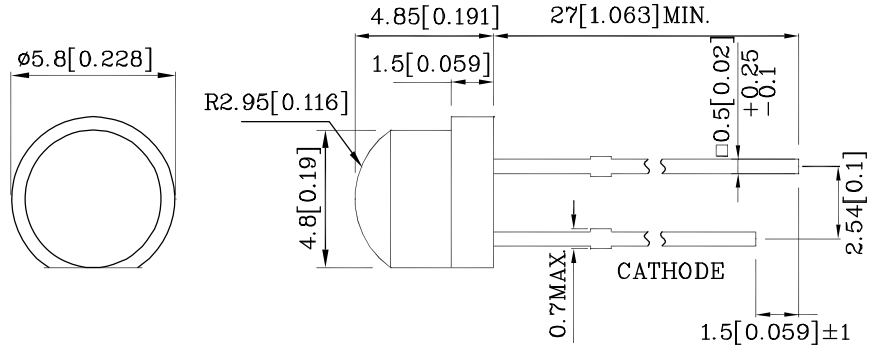
Features

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- RoHS Compliant



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



Notes:

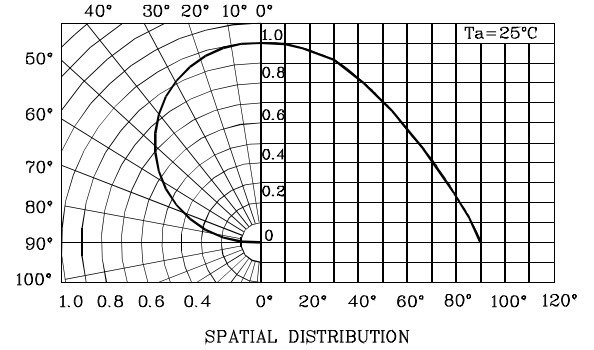
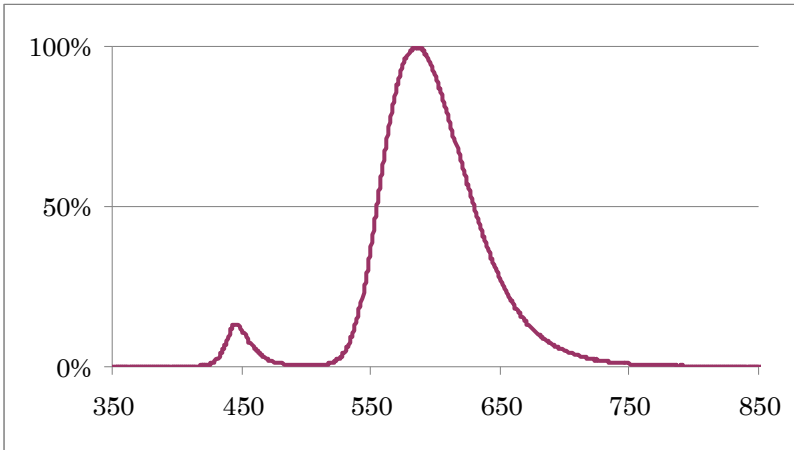
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25 (0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		FRS (InGaN)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	100	mA
Power Dissipation	P_D	120	mW
Electrostatic Discharge Threshold (HBM)		250	V
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]		260°C For 3 Seconds	
Lead Solder Temperature [5mm Below Package Base]		260°C For 5 Seconds	

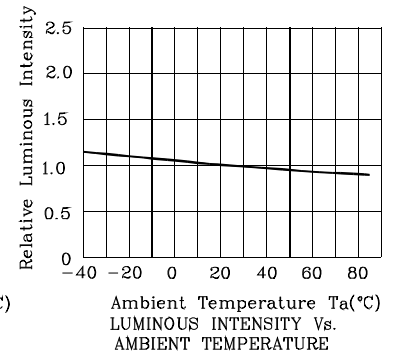
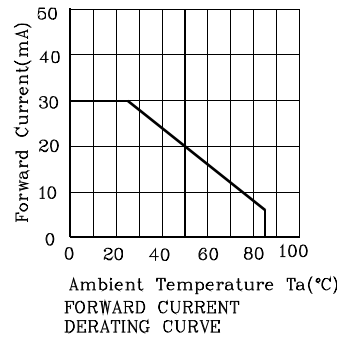
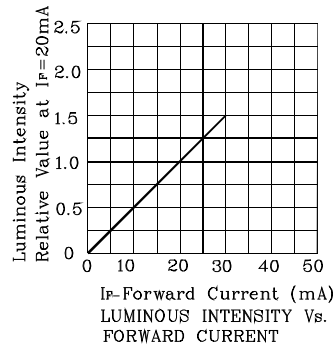
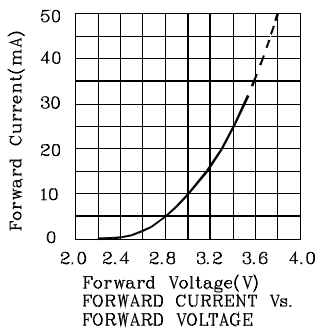
Operating Characteristics ($T_A=25^\circ\text{C}$)		FRS (InGaN)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	3.3	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	4.0	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	50	μA
Chromaticity Coordinates (Typ.)	x	0.51	
	y	0.42	
Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* ($I_F=20\text{mA}$) mcd		Viewing Angle 2 θ 1/2
				min.	typ.	
XL169W-EP22	Yellow	InGaN	Water Clear	700*	1295*	130°

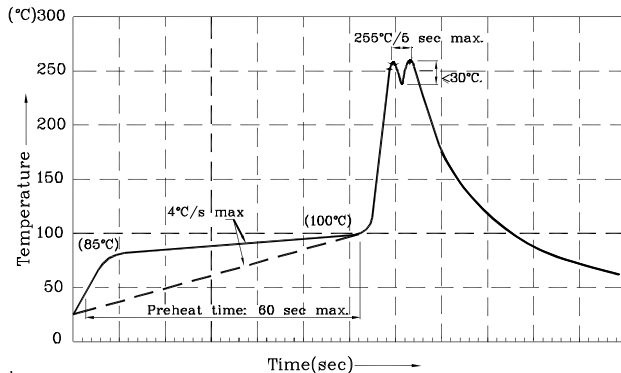
*Luminous intensity value is in accordance with CIE127-2007 standards.



❖ FRS



Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

- 1.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
- 2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
- 3.Do not apply stress to the epoxy resin while the temperature is above 85°C.
- 4.Fixtures should not incur stress on the component when mounting and during soldering process.
- 5.SAC 305 solder alloy is recommended.
- 6.No more than one wave soldering pass.

Remarks:

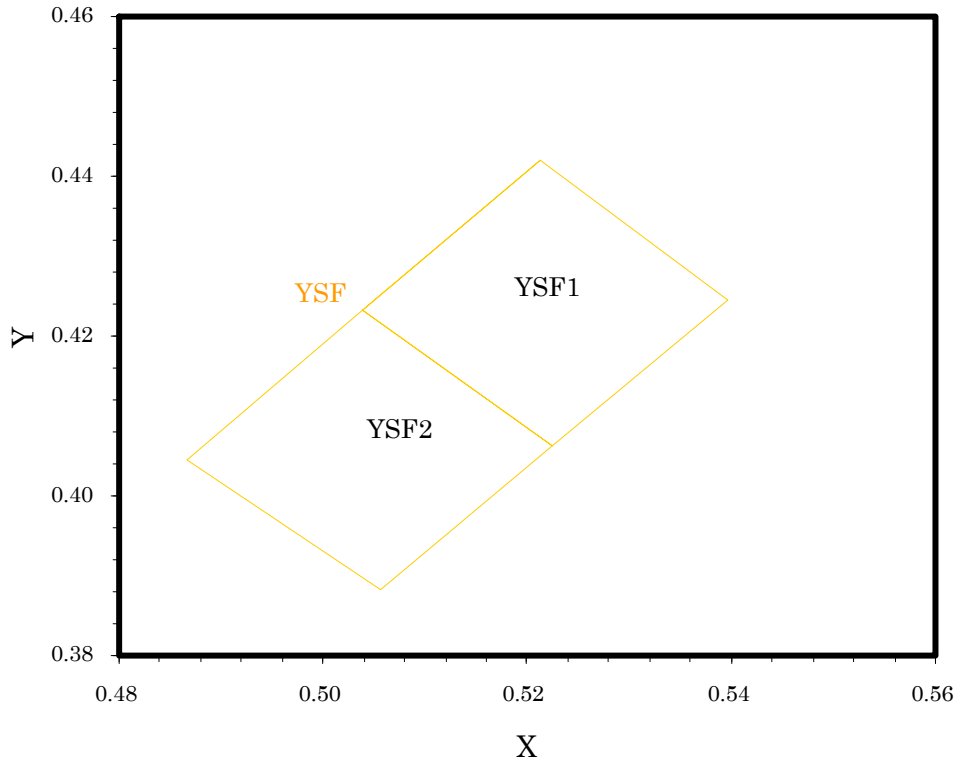
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux,) the typical accuracy of the sorting process is as follows:

1. Luminous Intensity / Luminous Flux: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

XL169W-EP22

CIE 1931

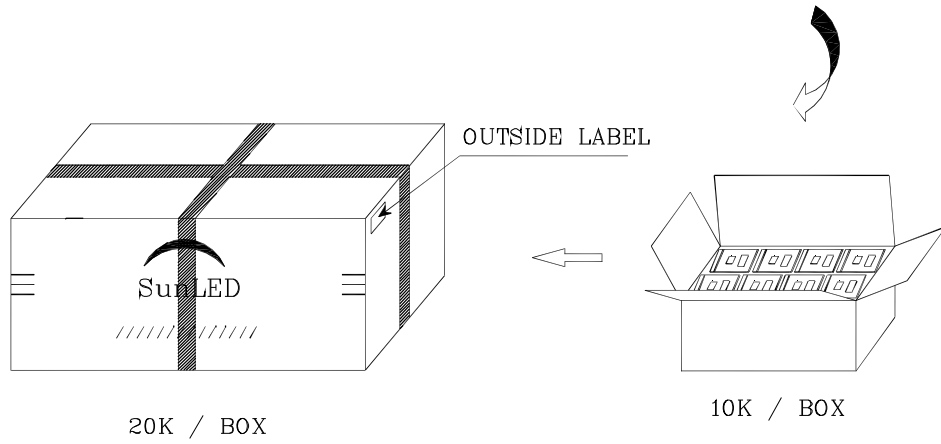
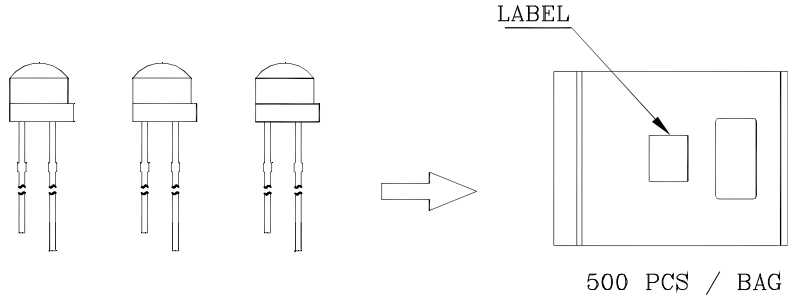



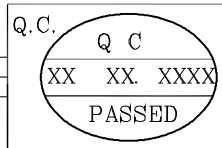

Bin code	x	y	Bin code	x	y
YSF1	0.5212	0.4220	YSF2	0.5038	0.4232
	0.5038	0.4232		0.4866	0.4045
	0.5225	0.4063		0.5055	0.3882
	0.5396	0.4246		0.5225	0.4063
	0.5212	0.4220		0.5038	0.4232

Notes:
 Shipment may contain more than one chromaticity regions.
 Orders for single chromaticity region are generally not accepted.
 Measurement tolerance of the chromaticity coordinates is ±0.02.



PACKING & LABEL SPECIFICATIONS

	
P/NO : XL169xxx	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	