EVERLIGHT ELECTRONICS CO.,LTD.

■ Benefits :

● Fewer LEDs Required
● Lowers Lighting System Cost

■ Features :

● High Flux Output.
● Designed for High Current Operation.
● Low Thermal Resistance.
● Low Profile.
● Packaged in Tubes for Use with Automatic
  Insertion Equipment.

■ Applications :

● Automotive Exterior Lighting
● Electronic Signs and Signals

■ Description :

This revolutionary package design allows the lighting designer to reduce the number of LEDs 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.
The low profile package can be easily coupled with reflectors or lenses to efficiently distribute light and provide the desired lit appearance.

This product family employs the world's brightest red-orange and amber LED materials,which allow designers to match the color of popular lighting applications,such as automotive tail,stop,and turn signal lamps,and electronic signs.

| PART NO	CHIP		Lens Color
	Material	Emitted Color	
30-01USOC	AlGaInP	Super Sunset Orange	Water Clear

■ Absolute Maximum Ratings at $T_A = 25℃$

Parameter	Symbol	Rating	Unit
Forward Current	If	70	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Topr	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	120	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	200	mA
Reverse Voltage	Vr	5	V

■ Package Dimension:
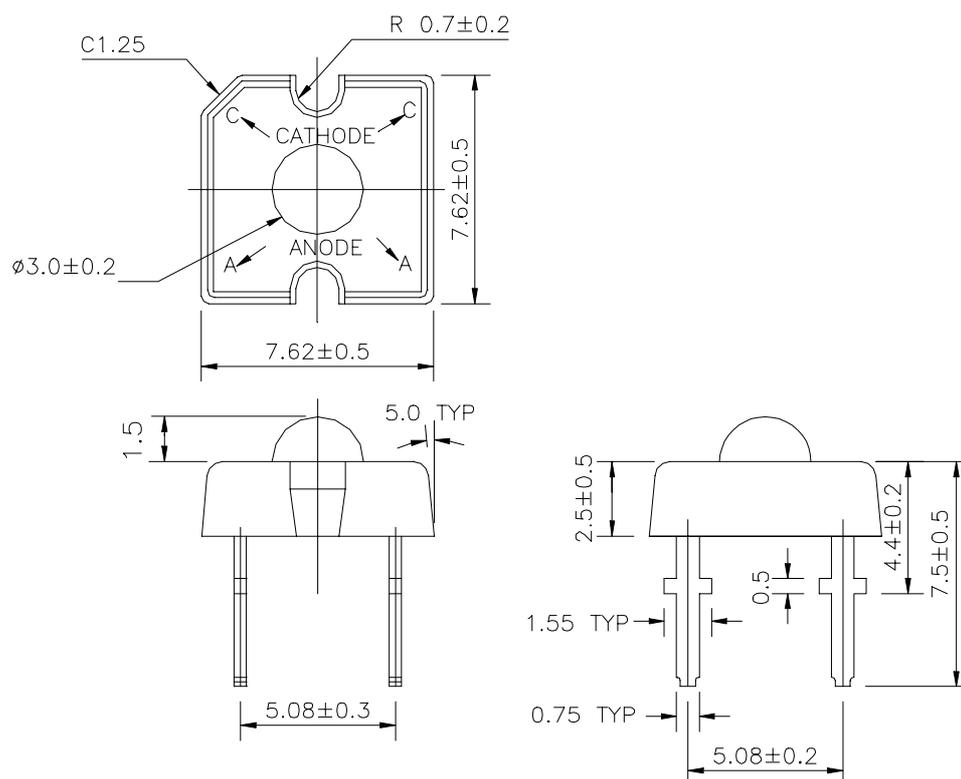
NOTES :
   1.All dimensions are millimeter.(inch)
   2.An epoxy meniscus may extend about 1.5mm(0.059") down the lead.

EVERLIGHT ELECTRONICS CO.,LTD.

■ Electro-Optical Characteristics :

| Parameter	Symbol	MIN.	TYP.	MAX.	Condition	Unit
Total Flux	Φv	500	1310	----	If=70mA	mlm
Viewing Angle	$2\theta 1/2$	----	70	----	If=20mA	deg
Peak Wavelength	λp	----	621	----	If=20mA	nm
Dominant Wavelength	λd	----	615	----	If=20mA	nm
Spectrum Radiation Bandwidth	$\triangle \lambda$	----	18	----	If=20mA	nm
Forward Voltage	Vf	1.71	2.30	2.91	If=70mA	V
Reverse Current	Ir	----	----	10	Vr=5V	μA
Recommened Operating Current	If (Rec)	20	----	70		mA
DC Forward Current	If (mA)	----	----	70		mA

■ Reliability test item and condition

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Soldering Heat	TEMP:260℃ ± 5 ℃	10±1 SEC	76 Pcs	0/1
2	Solderability	TEMP:230℃ ± 5 ℃	5±1 SEC	76 Pcs	0/1
3	Temperature Cycle	H : +85℃ 30min ∫ 5 min L : -55℃ 30min	50 CYCLES	76 Pcs	0/1
4	Thermal Shock	H : +100℃ 5min ∫ 10 sec L : -10℃ 5min	50 CYCLES	76 Pcs	0/1
5	High Temperature Storage	TEMP : 100℃	1000 HRS	76 Pcs	0/1
6	Low Temperature Storage	TEMP : -55℃	1000 HRS	76 Pcs	0/1
7	DC Operating Life	If(max) mA	1000 HRS	76 Pcs	0/1
8	High Temperature / High Humidity	85℃/85% RH	1000 HRS	76 Pcs	0/1

■ Typical Electro-Optical Characteristic Curves
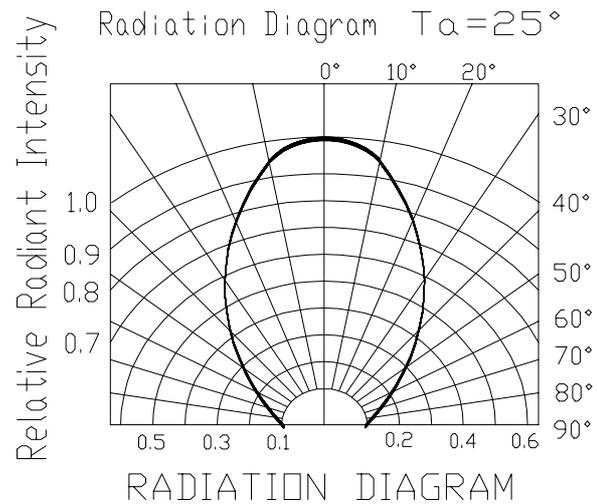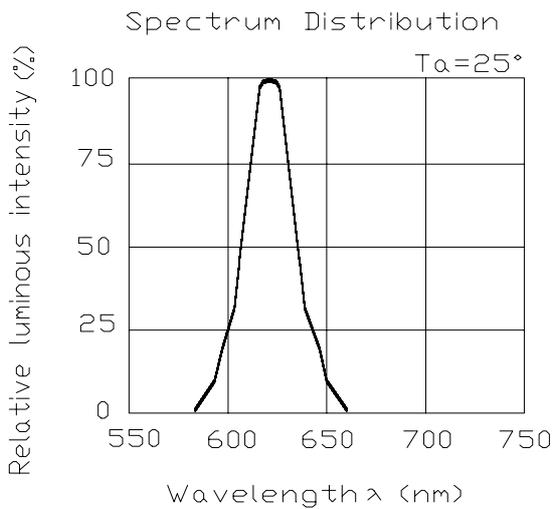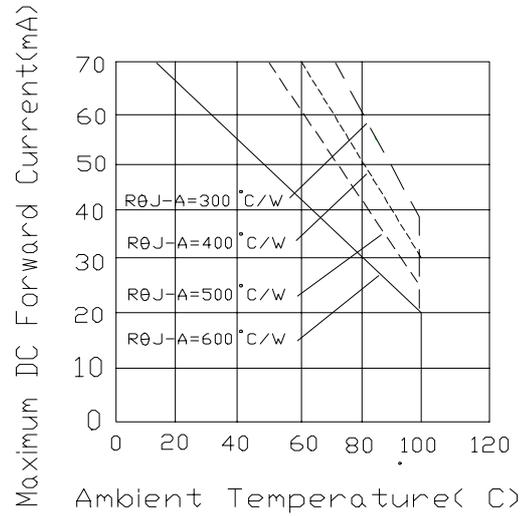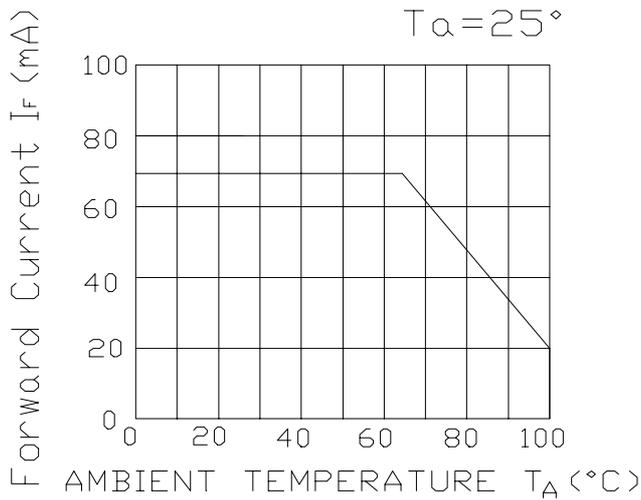
■ Specifications for Bin Grading

30－01USOC－ ☐ ☐ ☐
              ①   ②   ③

①	Vf(v)		②	λd(nm)		③	Φv(mlm)	
Bin	Min	Max	Bin	Min	Max	Bin	Min	Max
1	1.71	1.95	D	611	618	U	500	830
2	1.83	2.07	E	614	622	V	680	1310
3	1.95	2.19	F	616	634	W	990	1760
4	2.07	2.31				X	1440	2750
5	2.19	2.43				Y	2250	4100
6	2.31	2.55						
7	2.43	2.67						
8	2.55	2.79						
9	2.67	2.91						