



EVERLIGHT ELECTRONICS CO., LTD.

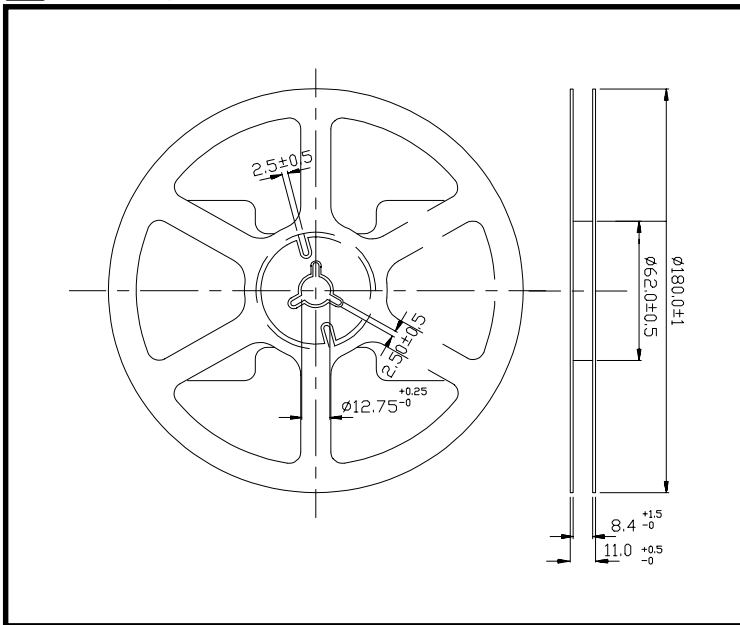
MODEL NO: 67-22SRUGC/TR8

Device Number : DSE-672-005 REV. 1.2

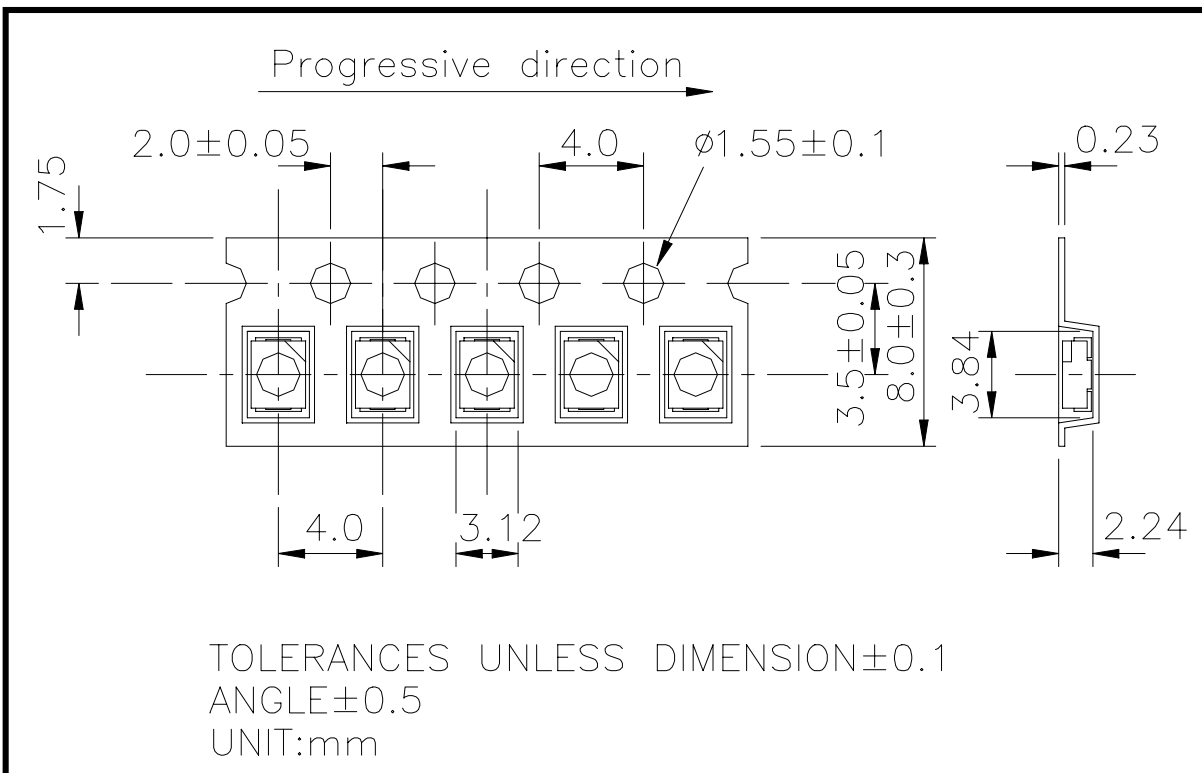
TOP LED

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Package Dimensions :



Loaded quantity per reel 2000 PCS/reel :





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

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _r	5	V
Forward Current	I _f	40	mA
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +90	°C
Soldering Temperature	T _{sol}	260 (for 5 second)	°C
Power Dissipation	P _d	110	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _f (Peak)	180	mA

■ Electronic Optical Characteristics (SR) :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous intensity	I _v	19.3	32.2	-----	mcd	I _f =20mA
Viewing Angle	2 θ 1/2	-----	120	-----	deg	I _f =20mA
Peak Wavelength	λ _p	-----	660	-----	nm	I _f =20mA
Dominant Wavelength	λ _d	-----	643	-----	nm	I _f =20mA
Spectrum Radiation Bandwidth	△ λ	-----	20	-----	nm	I _f =20mA
Forward Voltage	V _f	-----	1.7	2.4	V	I _f =20mA
Reverse Current	I _r	-----	-----	10	μ A	V _r =5V



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Absolute Maximum Ratings at Ta = 25°C (UG) :

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +90	°C
Soldering Temperature	Tsol	260 (for 5 second)	°C
Power Dissipation	Pd	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	160	mA

Electronic Optical Characteristics (UG) :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous intensity	Iv	15	25.1	-----	mcd	If=20mA
Viewing Angle	2 θ 1/2	-----	120	-----	deg	If=20mA
Peak Wavelength	λ p	-----	570	-----	nm	If=20mA
Dominant Wavelength	λ d	-----	571	-----	nm	If=20mA
Spectrum Radiation Bandwidth	△ λ	-----	30	-----	nm	If=20mA
Forward Voltage	Vf	-----	2.1	2.4	V	If=20mA
Reverse Current	Ir	-----	-----	10	μ A	Vr=5V



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■ **Reliability Test Items And Conditions :**

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	If = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1

Products are evaluated according to the above standard reliability criteria.



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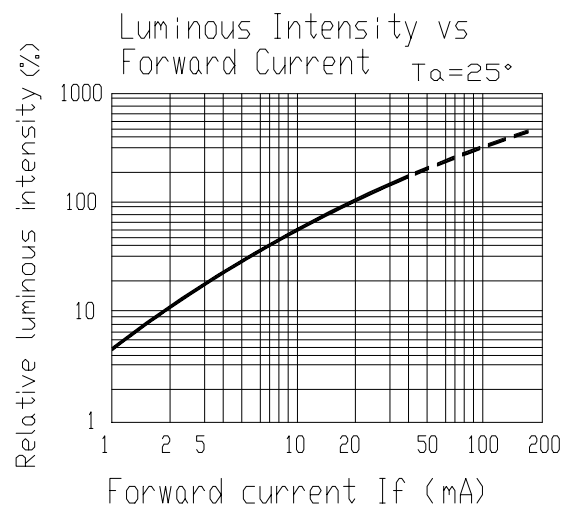
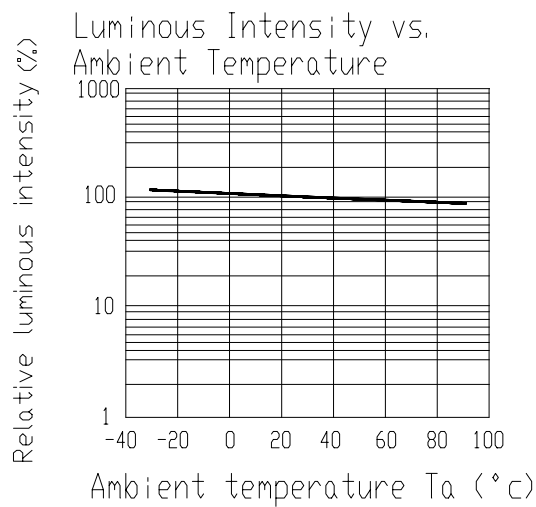
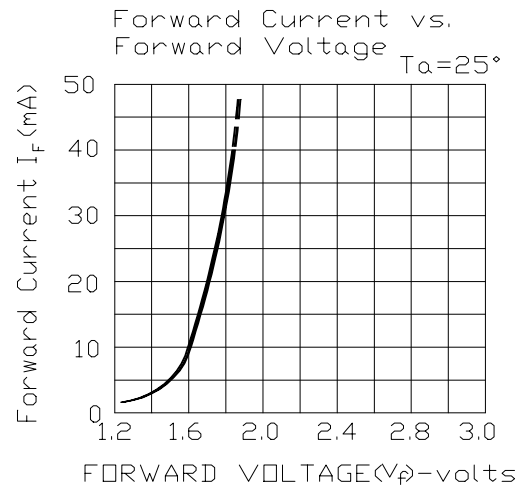
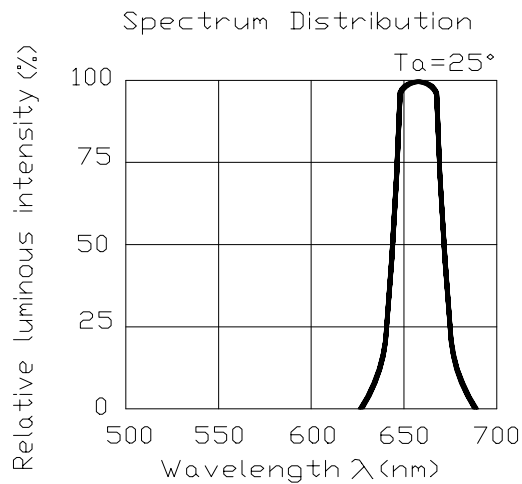
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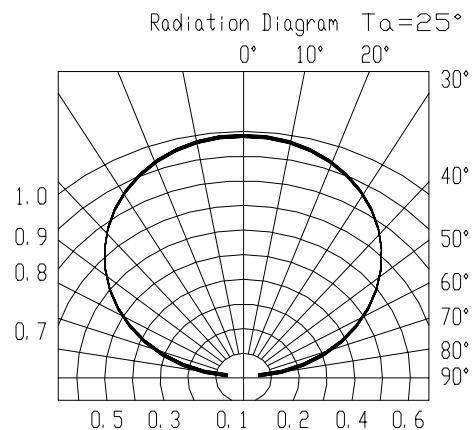
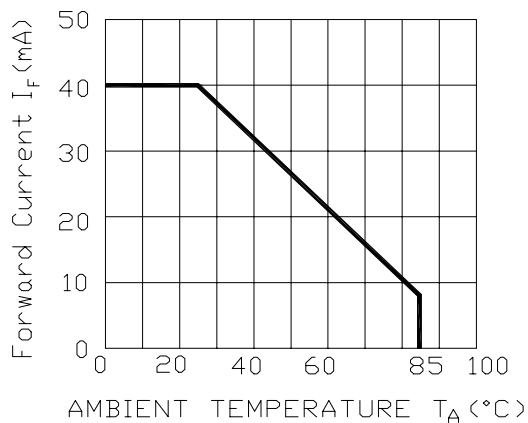
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Typical Electro-Optical Characteristic Curves(SR) :



Forward Current Derating Curve





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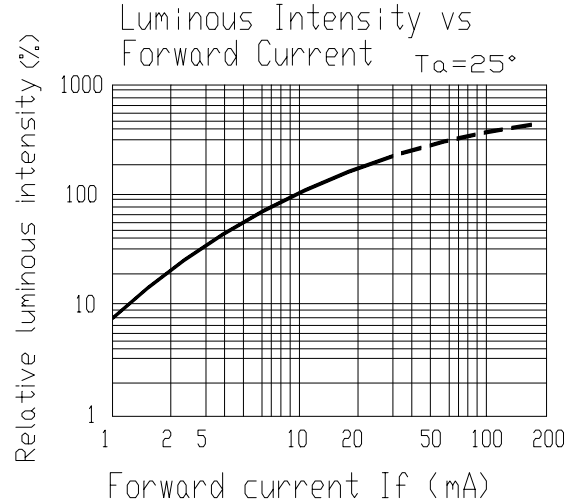
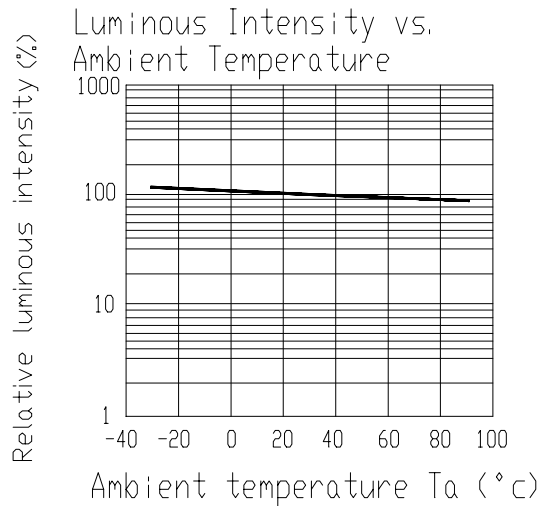
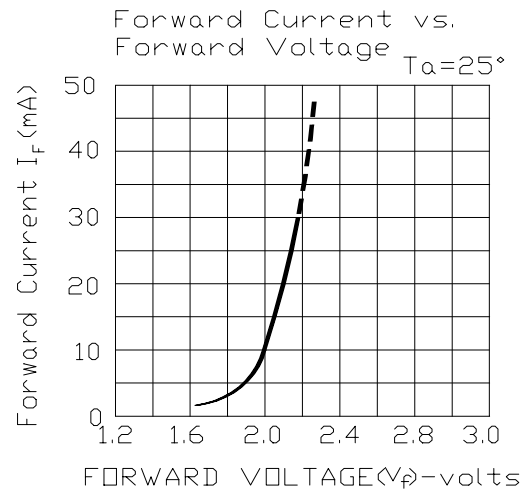
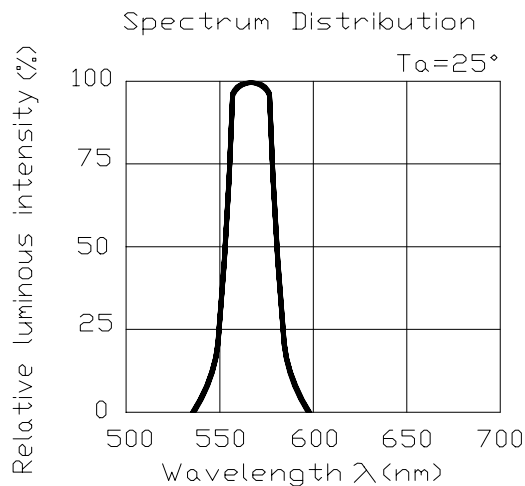
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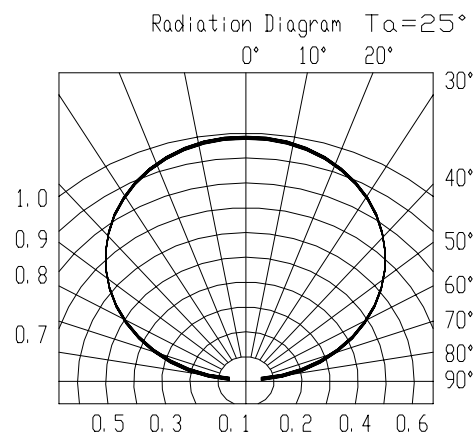
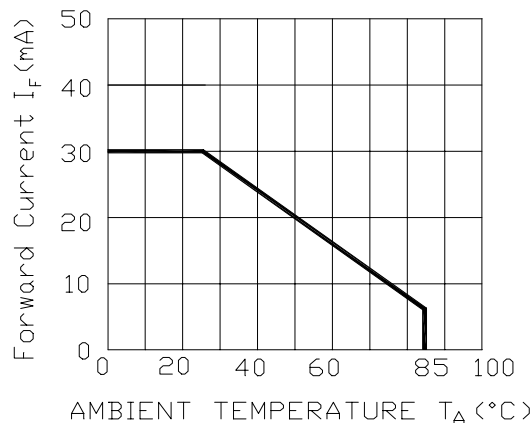
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Typical Electro-Optical Characteristic Curves(UG) :



Forward Current Derating Curve





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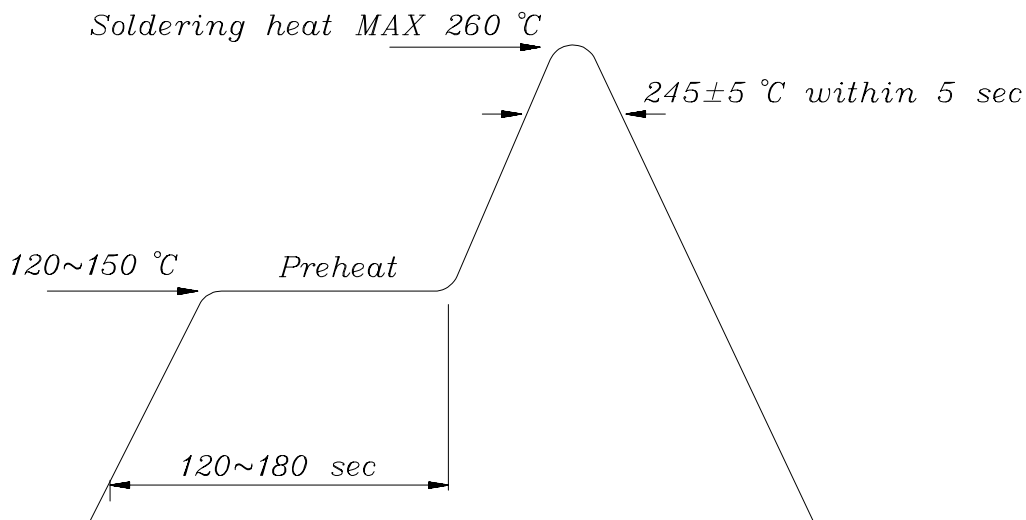
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■ Soldering heat reliability (DIP) :

Please refer to the following figure :

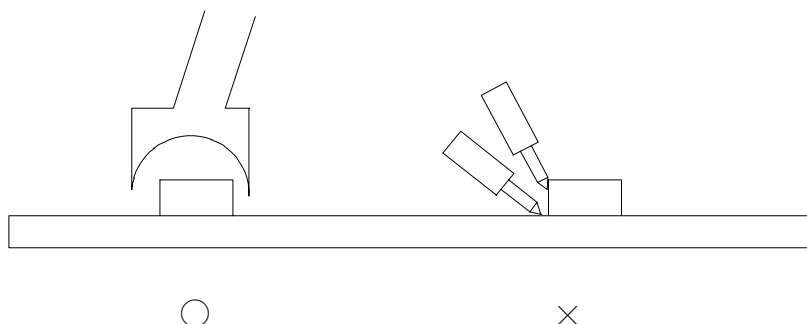


■ Soldering Iron :

Basic spec is ≤ 5 sec when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of Iron should be smaller than 15 W , and temperature should be controllable. Surface temperature of the device should be under 230°C .

■ Rework :

1. Customer must finish rework within 5 sec under 245°C .
2. The head of iron can not touch copper foil.
3. Twin-head type is preferred.





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■ Reflow Temp. / Time :

