MODEL NO: 67-21SYGC/S530-E2/ TR8 Device Number： DSE-671-077 REV. 1.0

TOP LEDs

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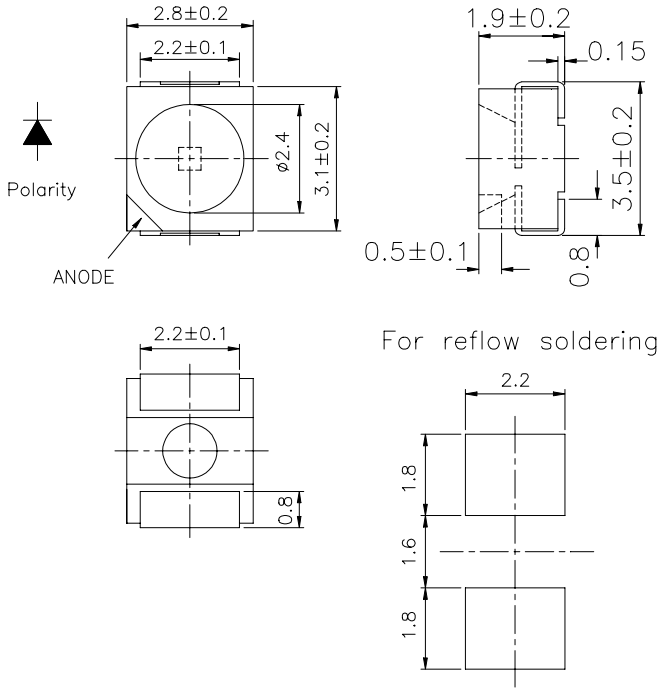
Features：

- P-LCC-2package.
- White package.
- Optical indicator.
- Colorless clear window.
- Ideal for backlight and light pipe application.
- Inter reflector.
- Low (2mA) current operation.
- Wide viewing angle.
- Computable with automatic placement equipment.
- Suitable for vapor-phase reflow, Infrared reflow and wave solder processes.
- Available on tape and reel (8mm Tape).

Description：

- The 67-21 series is available in soft-orange, green, blue and yellow, Due to the package design, the LED has wide viewing angle and optimized light coupling by inter reflector, this feature makes the SMT TOP LED ideal for light pipe application, The low current requirement makes this device ideal for portable equipment or any other application where power is at a premium.

Package Dimension：



Applications：

- Automotive: backlight in dashboards and switches
- Telecommunication: indicator and backlight in telephone and fax.
- Indicator and backlight for audio and video equipment.
- Indicator and backlight in office and family equipment.
- Flat backlight for LCD's, switches and symbols.
- Light pipe application.
- General use.

Notes:

Tolerances Unless Dimension ±0.1mm
Angle±0.5°
Unit = mm

PART NO	CHIP		Lens Color
	Material	Emitted Color	
67-21SYGC/S530-E2/ TR8	AlGaInP	Super Yellow Green	Water Clear

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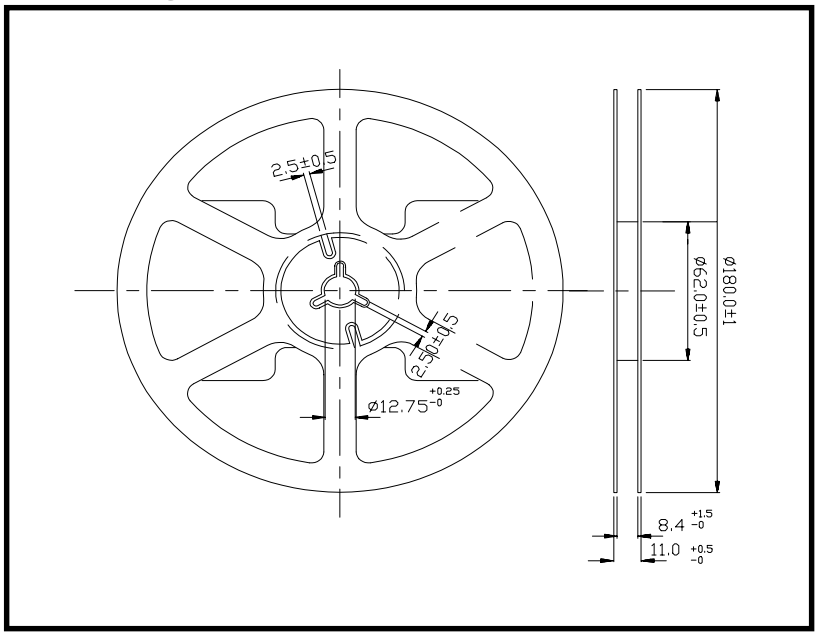
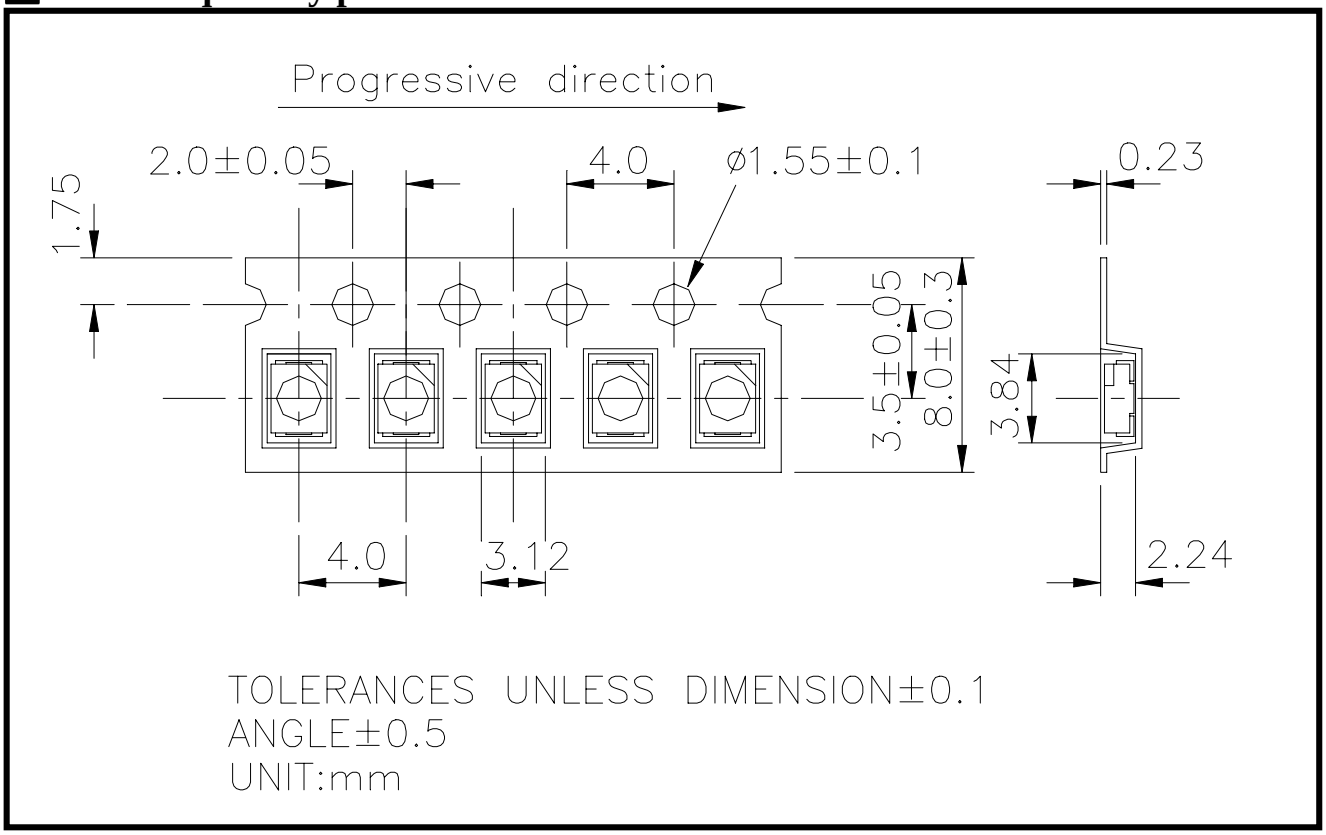
■ Package Dimension：



■ Loaded quantity per reel 2000 PCS/reel：



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■ Absolute Maximum Ratings at Ta = 25℃

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	25	mA
Operating Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40 ~ +90	℃
Soldering Temperature	Tsol	245 (for 5 second)	℃
Power Dissipation	Pd	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	180	mA

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous intensity	Iv	2	3	-----	mcd	If=2mA
	Iv	10	15	-----	mcd	If=10mA
	Iv	32	49	-----	mcd	If=20mA
Viewing Angle	2θ 1/2	-----	120	-----	deg	If=20mA
Peak Wavelength	λ p	-----	575	-----	nm	If=20mA
Dominant Wavelength	λ d	-----	573	-----	nm	If=20mA
Spectrum Radiation Bandwidth	△λ	-----	20	-----	nm	If=20mA
Forward Voltage	Vf	-----	2.0	2.4	V	If=20mA
Reverse Current	Ir	-----	-----	10	μA	Vr=5V

■ Reliability Test Item And Condition

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 ℃	5 SEC	76 Pcs	0/1
2	Temperature Cycle	H : +85℃ 30min ∫ 5 min L : -55℃ 30min	50 CYCLE	76 Pcs	0/1
3	Thermal Shock	H : +100℃ 5min ∫ 10 sec L : -10℃ 5min	50 CYCLE	76 Pcs	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 Pcs	0/1
5	High Temperature Storage	TEMP : -55℃	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℃/85% RH	1000 HRS	76 Pcs	0/1

Products are evaluated according to the above standard reliability criteria.

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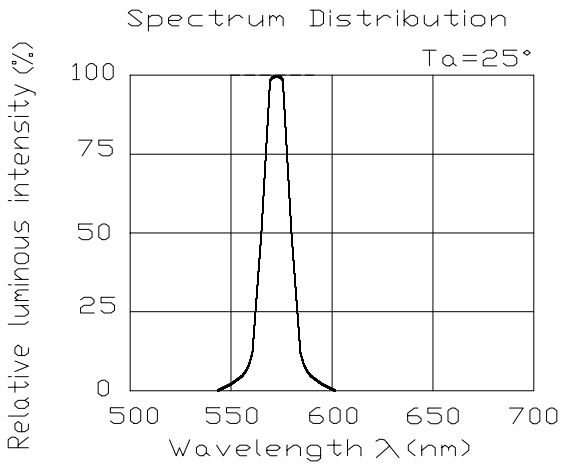
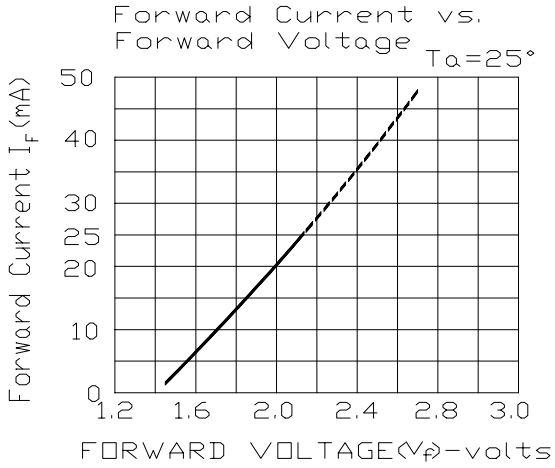
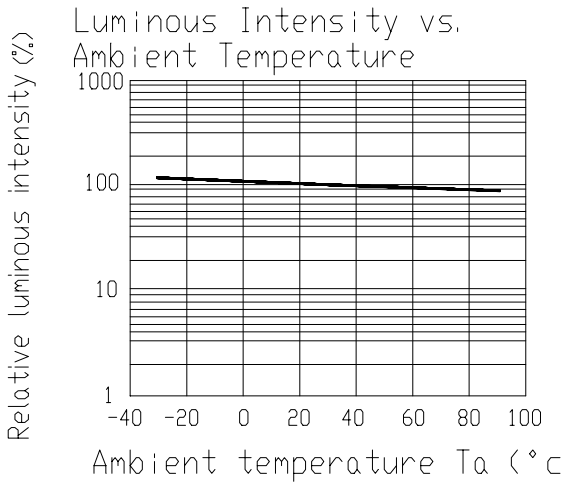
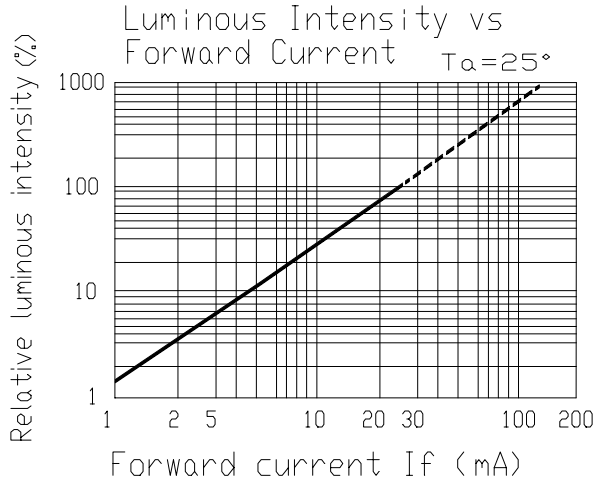
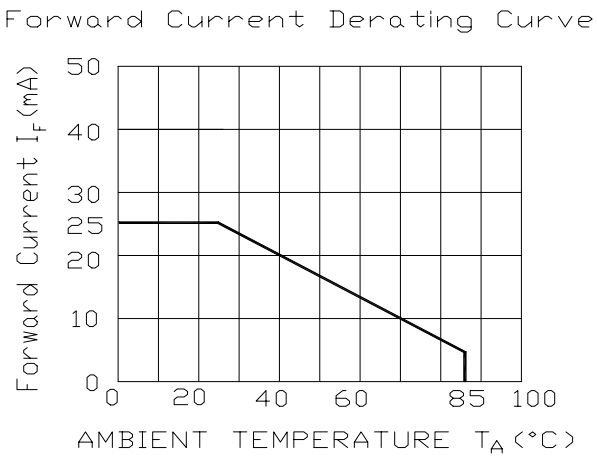
■ Typical Electro-Optical Characteristic Curves

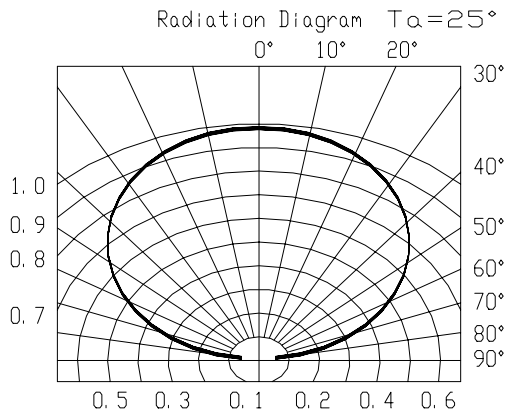






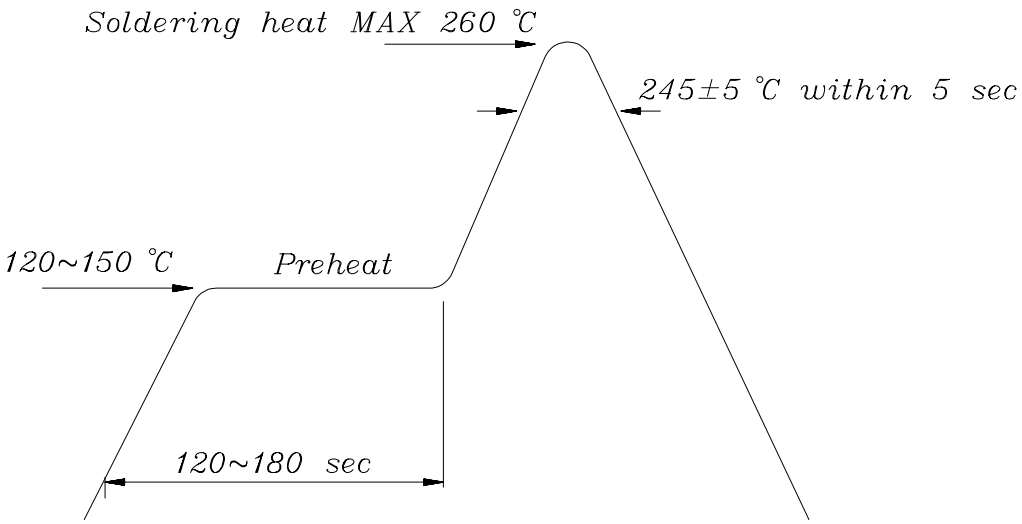






■ Soldering heat reliability (DIP)

Please refer to the following figure :

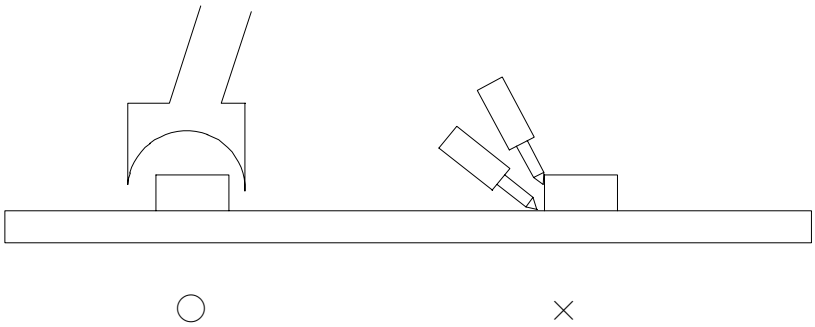


■ Soldering Iron

Basic spec is ≦5 sec when 260℃.If temperature is higher, time should be shorter (+10℃ → -1sec). Power dissipation of Iron should be smaller than 15 W , and temperature should be controllable. Surface temperature of the device should be under 230 ℃.

■ Rework

1. Customer must finish rework within 5 sec under 260℃.
2. The head of iron can not touch copper foil.
3. Twin-head type is preferred.



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■ Reflow Temp / Time：