

PACKAGE DIMENSION

◇ **Package Dimensions of Device**

UNIT: mm

◇ **Tape Specification: 3,000pcs per reel**

Packing Size													
Item	W	P1	E	F	D	D1	Po	10Po	P2	Ao	Bo	Ko	t
Spec.	8.00	4.00	1.75	3.50	1.5	1.0	4.00	40.00	2.00	1.42	2.24	1.04	0.254
Tolerance	±0.20	±0.10	±0.10	±0.05	+0.1	+0.25	±0.1	±0.20	±0.05	±0.10	±0.10	±0.10	±0.02

◇ **Package Dimensions of Reel**

◇ **Recommended Soldering Pad Dimensions**

NOTES:

- All dimensions are in millimeter(inch);
- Tolerance is ±0.1mm(0.004") especially other specified;
- Specifications are subject to change without notice.

SE-0805T-YC

✧ **Features:**

- **Dice Material:** GaP
- **Light Color:** Yellow
- **Lens Color:** Water Clear
- **Package in 8mm tape on 7" diameter reel**
- **Compatible with automatic placement equipment**
- **Compatible with reflow solder process**

✧ **Applications:**

- **Automotive:** backlighting in dashboard switch
- **Indicators**
- **LCD Back-lights**
- **Illuminations**

✧ **Absolute Maximum Ratings(Ta=25°C)**

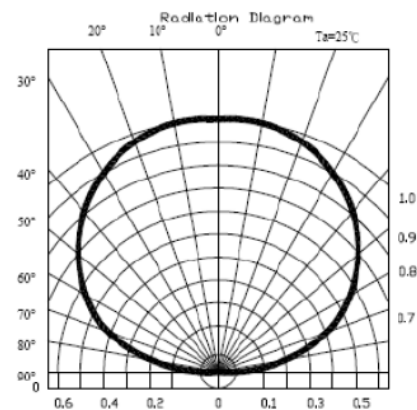
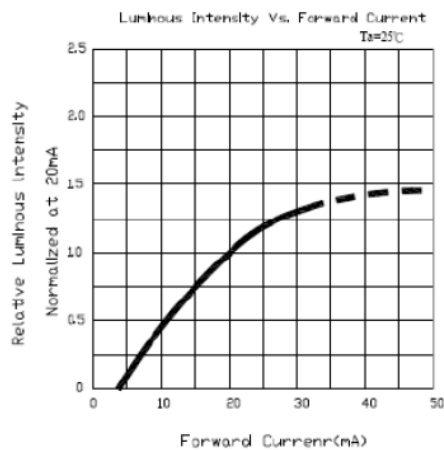
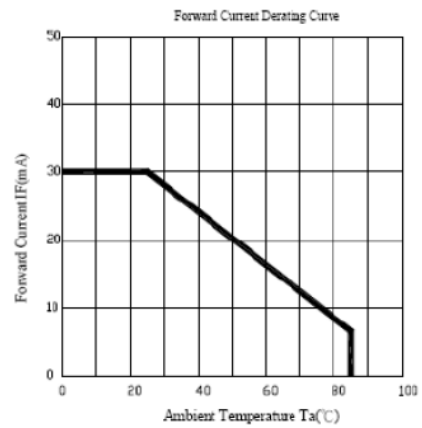
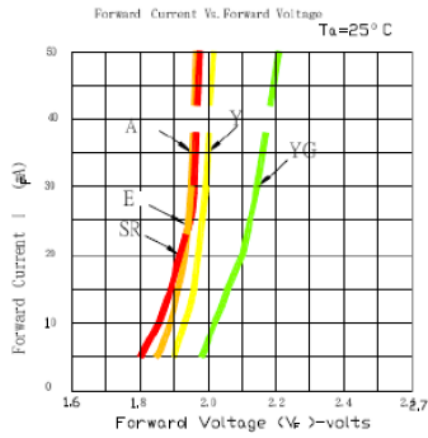
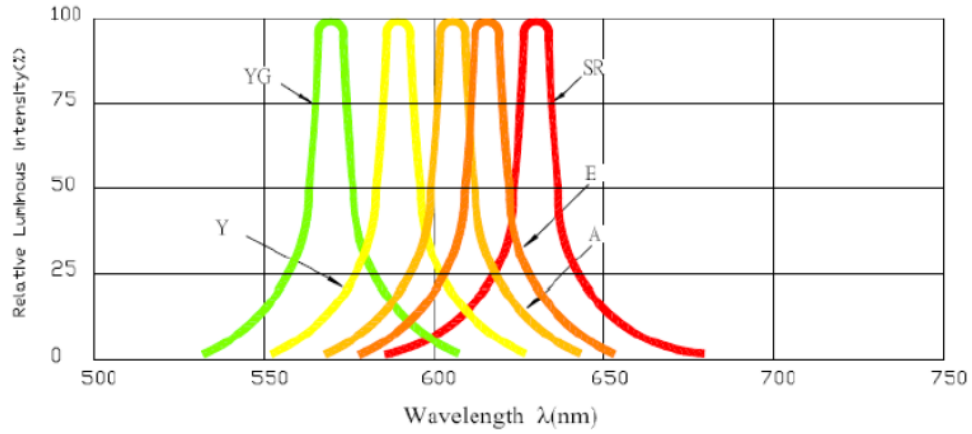
Item	Symbol	Maximum	Unit
Power Dissipation	P _D	81	mW
Continuous Forward Current	I _{Fmax}	30	mA
Peak Forward Current (1/10 Duty Cycle 0.1ms Pulse Width)	I _{FP}	125	mA
Reverse Voltage	V _R	5	V
Derating Linear From 25°C		0.3	mA / °C
Operating Temperature Range	T _{opr}	-30 to +80	°C
Storage Temperature Range	T _{stg}	-40 to +90	°C

✧ **Electrical / Optical Characteristics(Ta=25°C)**

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	2.00	2.20	2.70	V
Luminous Intensity	I _v	I _F =20mA	3.20	5.00	--	mcd
Peak Emission Wavelength	λ _P	I _F =20mA	--	592	--	nm
Dominant Wavelength	λ _D	I _F =20mA	585	590	595	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	--	130	--	deg
Reverse Current	I _R	V _R =5V	--	--	10	uA

The measuring tolerance: Luminous intensity ±15%; Wavelength(λ_D) ±2nm

◇ Typical Electro-Optical Characteristics Curves



SE-0805T-YC

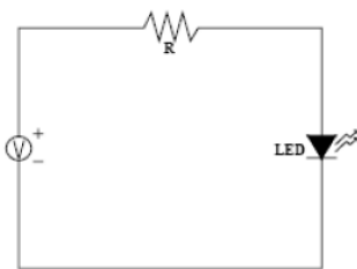
◇ Descriptions

- The Chip-LED Taping is much smaller than lead frame type components. Thus enable smaller board size, higher density, reduced storage space and finally smaller equipment to be obtained.
- Besides, lightweight makes them ideal for miniature application, etc.

◇ Reliability Test Items And Condititions

NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q'ty
1	Solder Heat	TEMP:260°C±5°C	5sec	48pcs
2	Temperature Cycle	90°C~25°C~30°C~25°C 30m 5m 30m 5m	300 cycles	48pcs
3	Thermal Shock	100°C~55°C 10m 10m	100 cycles	48pcs
4	Operating Life	IF=20mA	1000 hrs	48pcs
5	High Temperature Storage	TEMP: +90°C	1000 hrs	48pcs
6	Low Temperature Storage	TEMP: -30°C	1000 hrs	48pcs
7	High Temperature	80°C	1000 hrs	48pcs
8	High Humidity	80%R.H.	1000 hrs	48pcs

◇ Test Circuit



❖ **Precautions For Use**

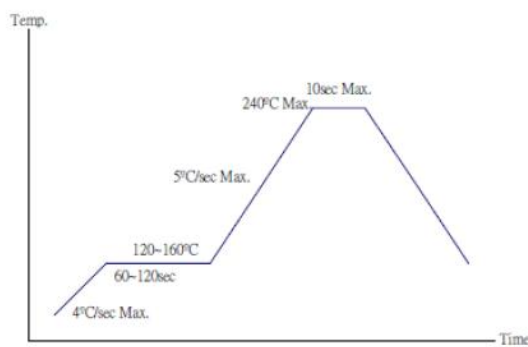
➤ **Overdrive current proof**

Customer must apply resistors for protection; otherwise slight voltage shift will cause current change with great deal. (Burn out will happen)

➤ **Storage**

- The operation of temperature and R.H. are: 5°C ~30°C, 60%R.H> Max.
- Once the packing is opened, the products should be used within a week. Otherwise, they should be kept in a damp-proof box with desiccant. Considering the tape life, we suggest our customers to use our products within 1.5 year (from production date).
- It's recommended to bake before soldering when the package is unsealed more than 72hrs. The condition is: 60°C±5°C for 15hrs.

❖ **Reflow Temp. / Time**



❖ **Hand Soldering Iron**

- Temperature at tip of iron: 400°C Max. (35W Max.)
- Soldering time: 3±1sec

❖ **Soldering Heat Reliability**

- Please refer to the following figure:

