
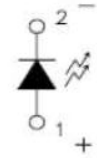


SE-1206T-YC

PACKAGE DIMENSION

◇ **Package Dimensions of Device**





 Unit:mm
 Tolerance:±0.1

1. Soldering terminal may shift in x, y direction.

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

Packing Size													
Item	W	P1	E	F	Do	D1	Po	10Po	P2	Ao	Bo	Ko	t
Spec.	8.00	4.00	1.75	3.50	1.50	1.00	4.00	40.00	2.00	1.88	3.50	1.27	0.23
Tolerance	±0.20	±0.10	±0.10	±0.05	$\begin{matrix} +0.10 \\ -0.00 \end{matrix}$	±0.05	±0.05	±0.20	±0.05	±0.10	±0.10	±0.10	±0.05

Unit:mm

◇ **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-1206T-YC

✧ Features:

- Dice Material: GaAsP
- 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)

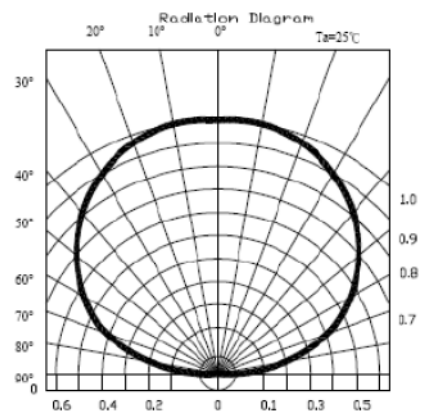
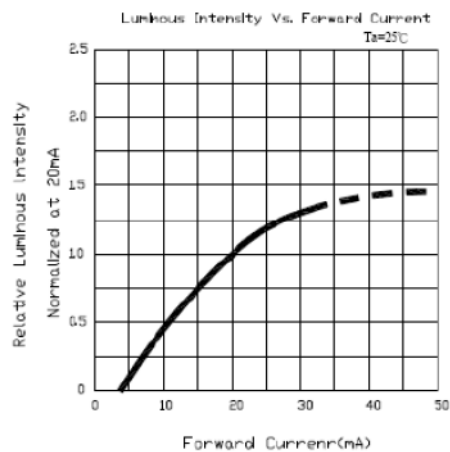
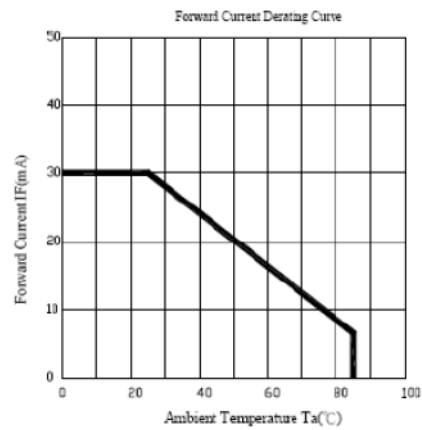
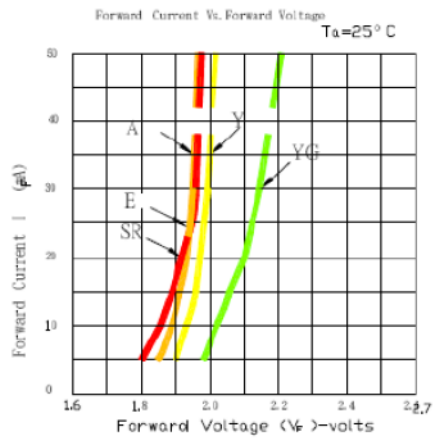
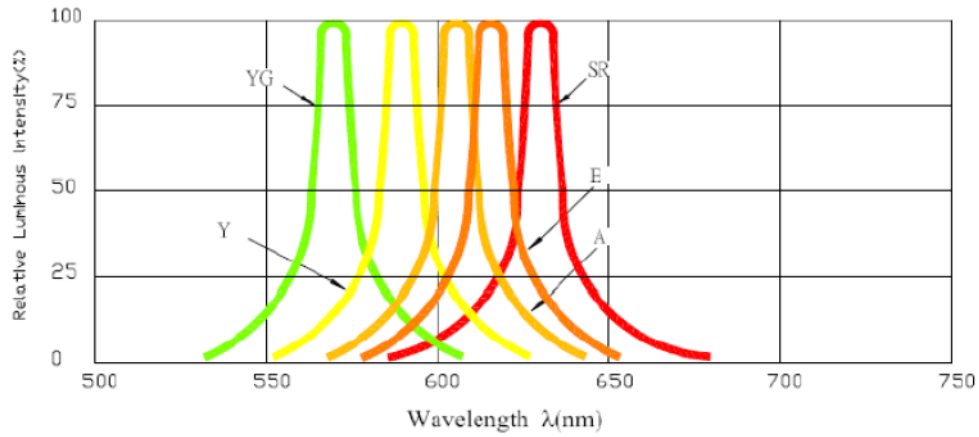
Item	Symbol	Maximum	Unit
Power Dissipation	PD	65	mW
Continuous Forward Current	IFmax	25	mA
Peak Forward Current (1/10 Duty Cycle 0.1ms Pulse Width)	IFP	100	mA
Reverse Voltage	VR	5	V
Derating Linear From 25°C		0.4	mA / °C
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +85	°C

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

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF=5mA	1.70	1.90	2.00	V
		IF=20mA	--	2.20	2.60	
Luminous Intensity	IV	IF=5mA	0.40	0.70	--	mcd
		IF=20mA	3.60	7.20	--	
Peak Emission Wavelength	λP	IF=20mA	--	583	--	nm
Dominant Wavelength	λD	IF=5mA	582	586	594	nm
		IF=20mA	585	588	594	
Viewing Angle	2θ½	IF=20mA	--	140	--	deg
Reverse Current	IR	VR=5V	--	--	10	uA

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

✧ Typical Electro-Optical Characteristics Curves



SE-1206T-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 Conditions**

NO.	Item	Test Condition	Test hr/cycle	Sample Q'ty	Ac / Rc
1	Solder Heat	TEMP:260°C±5°C; 10±1sec	2 times	20pcs	0 / 1
2	Solderbility Test §	TEMP:235°C±5°C; 3±1sec	1 time	5pcs	0 / 1
3	Temperature Cycle	-40°C ↔ 85°C 30m 5m 30m	100 cycles	20pcs	0 / 1
4	Thermal Shock	-40°C ↔ 85°C 5m 5m	50 cycles	20pcs	0 / 1
5	High Temperature Storage	TEMP: +85°C	1000 hrs	20pcs	0 / 1
6	Low Temperature Storage	TEMP: -40°C	1000 hrs	20pcs	0 / 1
7	DC Operation Life	I _F = I _{MAX}	1000 hrs	20pcs	0 / 1
8	High Temperature High Humidity	85°C 90%~95%R.H.	1000 hrs	20pcs	0 / 1
9	Shock Test	100~2000Hz; 98.1m/s ² X, Y, Z direction	2hrs	20pcs	0 / 1
10	Dropping Test	Put on pallet; height: 75cm	3 times	20pcs	0 / 1

Judgment Criteria

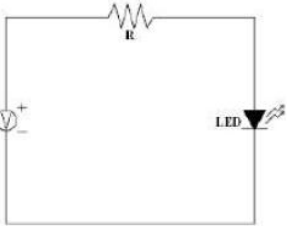
Forward Voltage V _F	V _F Max-Increase < 1.1x
Reverse Current I _R	I _R Max-Increase < I _{RMAX}
Luminous Intensity I _v	I _v Decay < 40%

§ Solderbility test criteria: coverage is not less than 95%

Note: Measurement shall be taken after the tested samples have been returned to normal ambient conditions (generally after two hours)

SE-1206T-YC

❖ **Test Circuit**



❖ **Hand Soldering Iron**

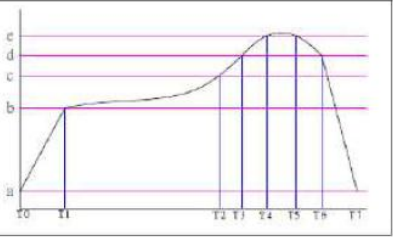
- Temperature at tip of iron: 400°C Max. (35W Max.)
- Soldering time: 3±1sec

❖ **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**

TEMP (°C)		TIME (sec)	
a	25	T0~T1	5°C/sec max
b	150	T1~T2	90~130
c	200	T2~T3	5°C/sec max
d	230	T3~T6	60~90
e	260	T4~T5	10±1
		T6~T7	-6°C/sec max
MSL level		Level 1	



❖ **Flow Temp. / Time**

TEMP (°C)		TIME (sec)	
a	25	T1~T2	60±30
b	130±10	T4~T5	10
c	185		
d	265		

