

# Product Guide



PY1114CK Super Thin Type SMT LED

#### Features

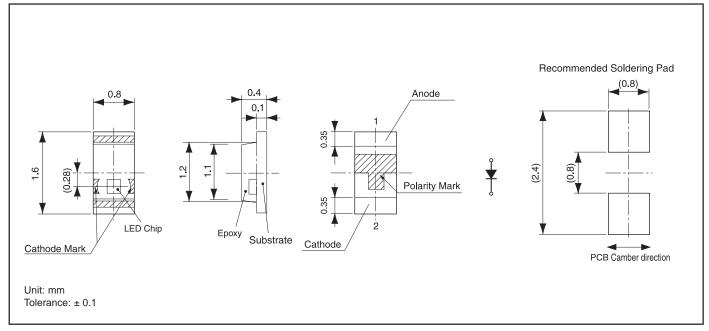
- Super thin type: height is only 0.4mm
- Excellent for applications where saving space is critical

# Applications

- Cellular phone keyboard backlighting
- Backlighting for switches

### Outline Dimensions

# **Preliminary**



# ■ Electro-Optical Characteristics

(Ta=25°C)

Part No.	Material	Emitted Color	Lens Color	Lur Inte		y Iv	Peak Ap TYP.		Spectral Line Half Width AX TYP.	l <sub>F</sub>	Vo	orwa Itage  MAX.	<b>V</b> F	Reve Curre		Viewing Angle (2 0 1/2)
PY1114CK	GaP	Yellow-Green	Milky White	3.3	5.6	10	570	572	30	10	2.1	2.8	10	100	4	140°
		Unit		mo	cd	mΑ		nm	1	mΑ	\	/	mΑ	μΑ	V	Deg.

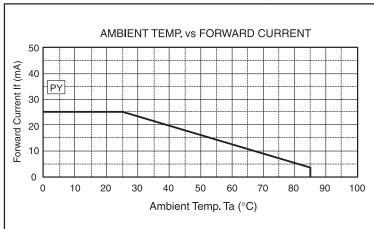
## Absolute Maximum Ratings

(Ta=25°C)

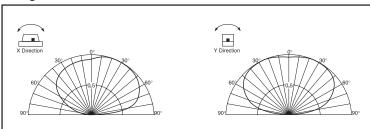
Item		Yellow	Unit
item	Symbol		
Power Dissipation	Pd	75	mW
Forward Current	l <sub>F</sub>	25	mA
Peak Forward Current	Ігм	60	mA
Reverse Voltage	V <sub>R</sub>	4	V
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Derating*	Δlf	0.36 (DC) 0.86 (Pulse)	mA/°C

<sup>\*</sup> Ta=25°C,  $I_{\text{FM}}$  applies for the pulse width  $\leq$  1msec. and duty cycle  $\leq$ 1/20.

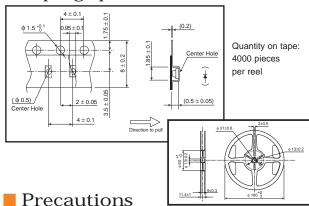
# Operation Current Derating Chart (DC)



# Spatial Distribution

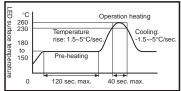


# Taping Specifications



Please follow these handling precautions to prevent damage to the chip and ensure its reliability.

- 1. Soldering conditions:
  - <u>Soldering iron</u>: Temperature at tip of iron: 350°C max. (30W max.) Soldering time: 3 sec. max.
  - <u>Dip soldering</u>: Preheating: 120°C max. (resin surface temp.) 60 sec. max. Bath temperature: 265°C max. Dipping Time: 5 sec. max.
  - Reflow Soldering:



#### 2. Cleaning:

- If cleaning is required, use the following solutions for less than 1 minute, at less than 40°C.
- Appropriate chemicals: Ethyl alcohol and isopropyl alcohol.
- Effect of ultrasonic cleaning on the LED resin body differs depending on such factors as the oscillator output, size of PCB and LED mounting method. The use of ultrasonic cleaning should be enforced at proper output after confirming there is no problem.

Product specifications subject to change without notice. PY1114CK-0102

