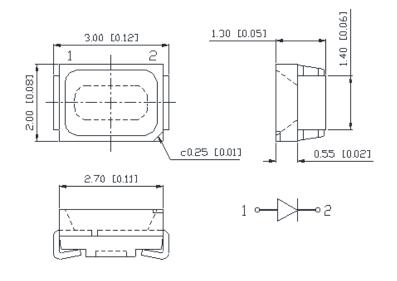
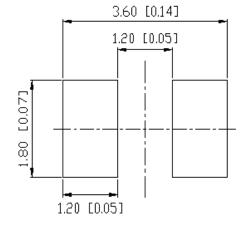


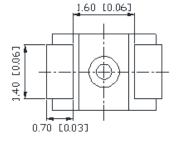
# SPECIFICATION CSPA128Y2C

## **PACKAGE OUTLINES**





RECOMMEND PAD LAYOUT



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25mm (0.01") unless otherwised noted.
- 3. Specifications are subject to change without notice.

Part Number Chip Mater		Chip Material	Color of Emission	Lens Type	Viewing Angle		
	CSPA128Y2C	InGaAlP	Yellow	Water Clear	120°		





# **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

Parameter	Symbol	Max Rating	Unit	
Forward Current	lF	30	mA	
Reverse Current @ 5V	lR	10	μA	
Operating Temperature Range	Тор	-40~+80	°C	
Storage Temperature Range	Тѕтс	-40~+85	°C	
Peak Pulsing Current (1/8 duty f = 1KHz)	lFP	125	mA	
Soldering Temperature	TsoL	Max 260°C for 5 sec Max		

# **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
Parameter		Test Condition	Min	Тур	Max	Unit
Luminous Intensity	lv	IF = 20mA	125	240	-	Mcd
Forward Voltage	VF	IF = 20mA	-	2.1	2.5	V
Reverse Leakage Current	lR	VR = 5V	-	-	10	μΑ
Viewing Angle at 50% Iv	201/2	IF = 20mA	-	120	-	Deg
Peak Wavelength	λР	IF = 20mA	-	595	-	nm
Dominant Wavelength	λD	IF = 20mA	-	590	-	nm
Spectral Half Bandwidth	Δλ	IF = 20mA	-	16	-	nm

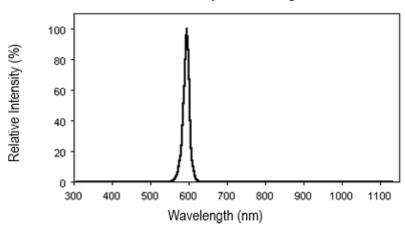
<sup>\*</sup>Tolerance of viewing angle: -10 / +5 deg.



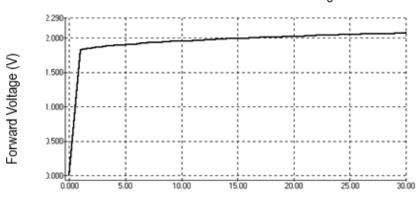


# **OPTICAL CHARACTERISTIC CURVES**

#### Relative Intensity vs. Wavelength

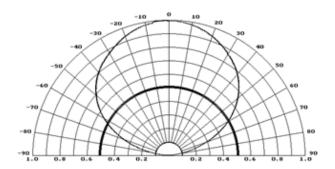


### Forward Current vs. Forward Voltage



Forward Current (mA)

#### Directive Characteristics

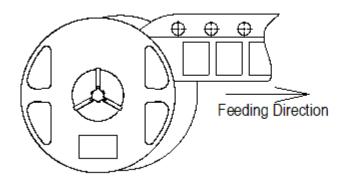




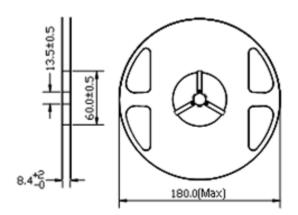


# **PACKAGING SPECIFICATION**

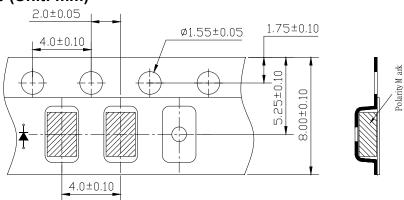
### **Feeding Direction**



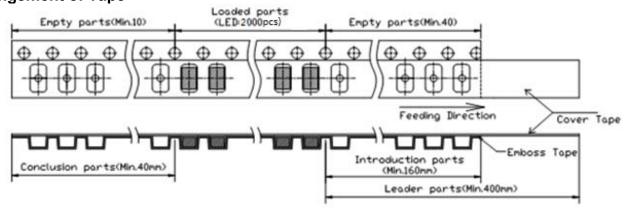
### **Dimensions of Reel (Unit: mm)**



### **Dimensions of Tape (Unit: mm)**



### **Arrangement of Tape**



#### Notes:

- 1. Empty component pockets are sealed with top cover tape
- 2. Maximum number of missing lamp is two
- 3. Cathode is oriented towards the tape sprocket hole
- 4. 2,000pcs/Reel

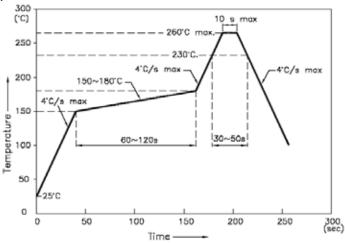




# **SOLDERING CONDITIONS**

#### REFLOW PROFILE

• I/R Reflow Temp/Time



- We recommend the reflow temperature 245°C (±5 °C) & the maximum soldering temperature should be limited to 260 °C.
- Do not cause stress to the epoxy resin while it is exposed to high temperature.
- Number of reflow process should be 2 times or less.
- Soldering Iron:
  - Basic spec is ≤ 5 sec when 260 °C. If the temperature is higher, time should be shorter (+10 °C → -1 sec). Power dissipation of iron should be smaller than 20W and temperature should be controllable. Surface temperature of the device should be under 230 °C.
- Rework:
  - Customer must finish rework within 5 sec under 260 °C
  - The head of iron cannot touch copper foil
  - Twin-head type is preferred

