

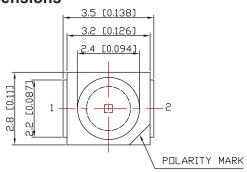
#### **Features**

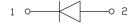
- 3.5mm × 2.8mm SMT LED, 1.9mm Thickness.
- · Wide Viewing Angle.
- · Ideal For Backlight And Indicator.

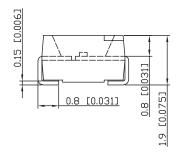
## **Applications**

- · Automotive: Backlighting in dashboard and switch.
- Telecommunication: Indicator and Backlighting in telephone and fax.
- · Flat Backlight for LCD switch and symbol.

### **Package Dimensions**







#### Notes

- 1. All dimensions are in millimeters.
- 2. Tolerance is ±0.25 unless otherwise noted.
- 3. Specifications are subject to change without notice.

#### **Device Selection Guide**

Part No.	Cł	nip	Lens Colour
MP007085	Material	Emitted Colour	Water Clear
	(InGaAIP)	Yellow	water Clear

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**Dimensions: Millimetres** 

RoHS

**Compliant** 

### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Value	Unit	
Power Dissipation	Po	62	mW	
Forward Current	lF	25	mA	
Peak Forward Current*1	IFP	100	mA	
Reverse Voltage	VR	5	V	
Operating Temperature	Topr	-40°C To +85°C		
Storage Temperature	Tstg	-40°C To +85°C		

#### Notes

#### Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Тур.	Max	Unit	Test Conditions
Forward Voltage	VF	1.8		2.6	V	IF=20mA
Reverse Current	lr			10	μA	VR=5V
Dominate Wavelength	λп	586	_	594	nm	IF=20mA
Luminous Intensity	lv	845	_	1800	mcd	IF=20mA
Viewing Angle	2θ1/2	_	120		Deg.	IF=20mA

#### Remarks

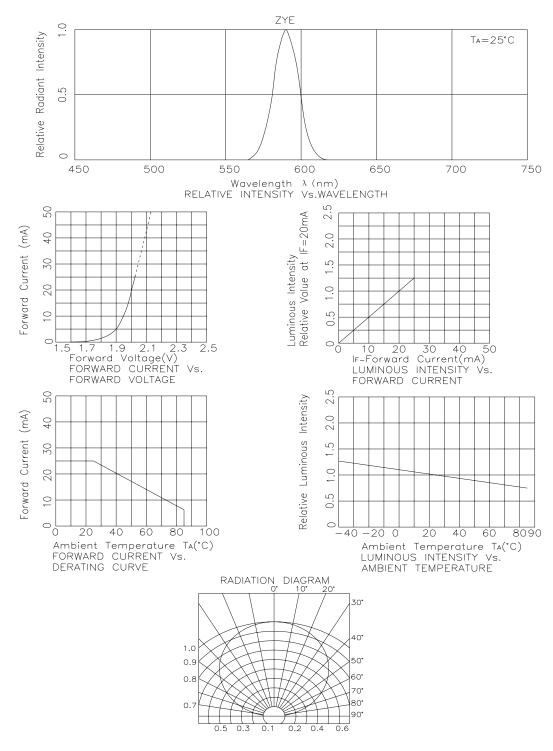
If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or chromaticity), the typical accuracy of the sorting process is as follows:

wavelength: ±1nm
 Luminous Intensity: ±15%
 Forward Voltage: ±0.1V



<sup>\*1:</sup> Pulse width≤0.1ms, Duty cycle≤1/10

## Typical Electrical/Optical Characteristics Curves



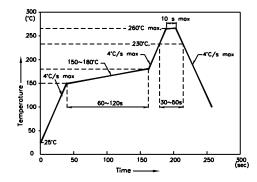
Dimensions : Millimetres

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#### **Soldering Profile**

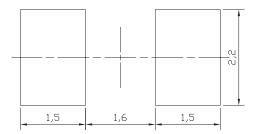
Reflow Soldering Profile For Lead-free SMT Process.



#### Notes

- 1. We recommend the reflow temperature 245°C. (±5°C) The maximum soldering temperature should be limited to 260°C.
- 2. Don't cause stress to epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

### Recommended soldering pattern



### **Tape specifications**

TAPE

4.00±0.10 2.00±0.05 1.55±0.05

0.23±0.05

1.55±0.05

2.08±0.10

Dimensions: Millimetres

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#### Storage

- Storage condition before opening the package: 5°C to 30°C, the largest percentage relative humidity is 60% and the storage period is one month. The LEDs beyond the storage period just can be used after dealing as step 4.
- After opening the package, If the LEDs will be Infrared reflow soldering, Oxygen phase reflow soldering or any other welding.
  - a. must be welding within 24 hours.
  - b. the storage humidity must be below 30%.
- If the situation does not satisfy 2a or 2b, the LEDs must be roasted.
- If the LEDs need to be roasted, the roast temperature should be 60°C+/-3 and the roast timeshould be 48 hours.

#### **ESD** (Electrostatic Discharge)

Static Electricity or power surge will damage the LED.

The following procedures may decrease the possibility of ESD damage.

- · All production machinery and test instruments must be electrically grounded.
- Use a conductive wrist band or anti-electrostatic glove when handling these LEDs.
- Maintain a humidity level of 50% or higher in production areas.
- Use anti-static packaging for transport and storage.

### **Part Number Table**

Description	Part Number
SMD LED, Yellow, 120°, 1800mcd, 3.5mm x 2.8mm	MP007085

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