

0402 Package 0.45mm Height Super Yellow LED

Features

- Package in 8mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Mono-color type
- RoHS compliance



M1005



Descriptions

- The SMD series enables smaller board size, higher packing density, reduced storage space, and small equipment.
- Besides, light weight makes them ideal for miniature applications.

Applications

- Backlighting in dashboard and switch.
- Telecommunication: indicator and backlighting in telephone and fax.
- Flat backlight for LCD, switches and symbols.
- General use.

Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
TSP1-XF1005H5A6	AlInGaP	Super Yellow	Water Clear

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Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	25	mA
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	60	mA
Power Dissipation	P_d	60	mW
Electrostatic Discharge (HBM)	ESD	2000	V
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +90	°C
Soldering Temperature	T_{sol}	Reflow Soldering: 260 °C for 10 seconds Hand Soldering: 350 °C for 3 seconds	

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I_v	60	89	-----	mcd	I _F =20mA
Viewing Angle	2θ_{1/2}	-----	120	-----	deg	
Peak Wavelength	λ_p	-----	591	-----	nm	
Dominant wavelength	λ_d	-----	589	-----	nm	
Spectrum Radiation Bandwidth	Δλ	-----	15	-----	nm	
Forward Voltage	V_F	1.7	2.0	2.4	V	V _R =5V
Reverse Current	I_R	-----	-----	10	μA	

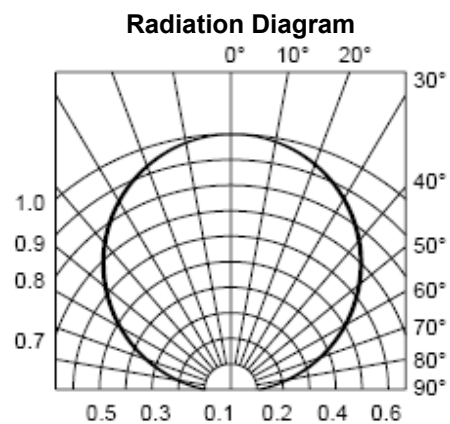
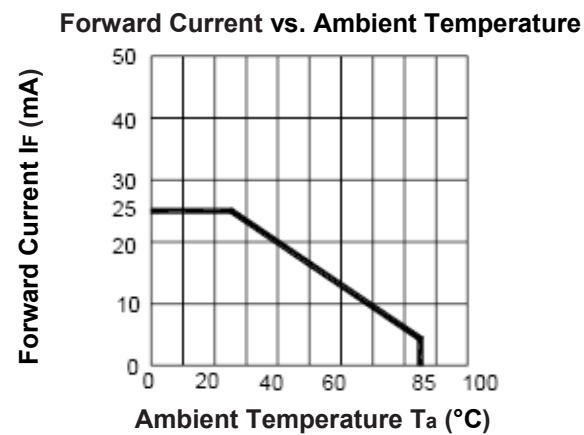
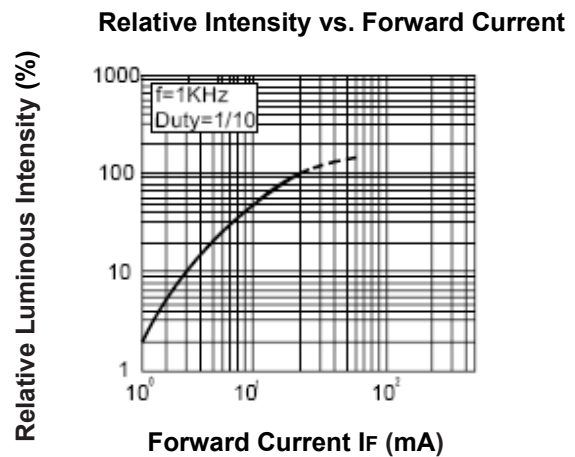
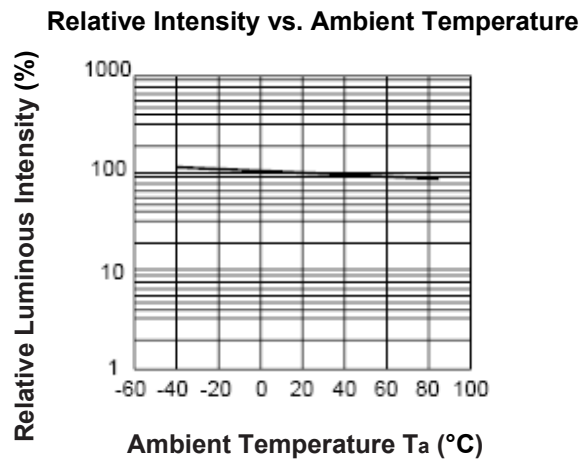
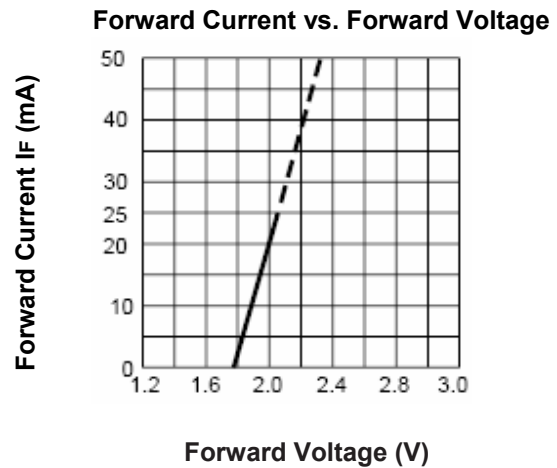
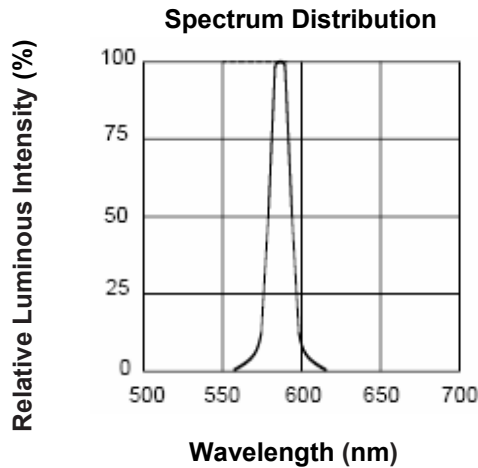
Notes:

1. Tolerance of Luminous Intensity ±10%
2. Tolerance of Dominant wavelength ±1.0nm
3. Tolerance of Forward Voltage: ±0.1V

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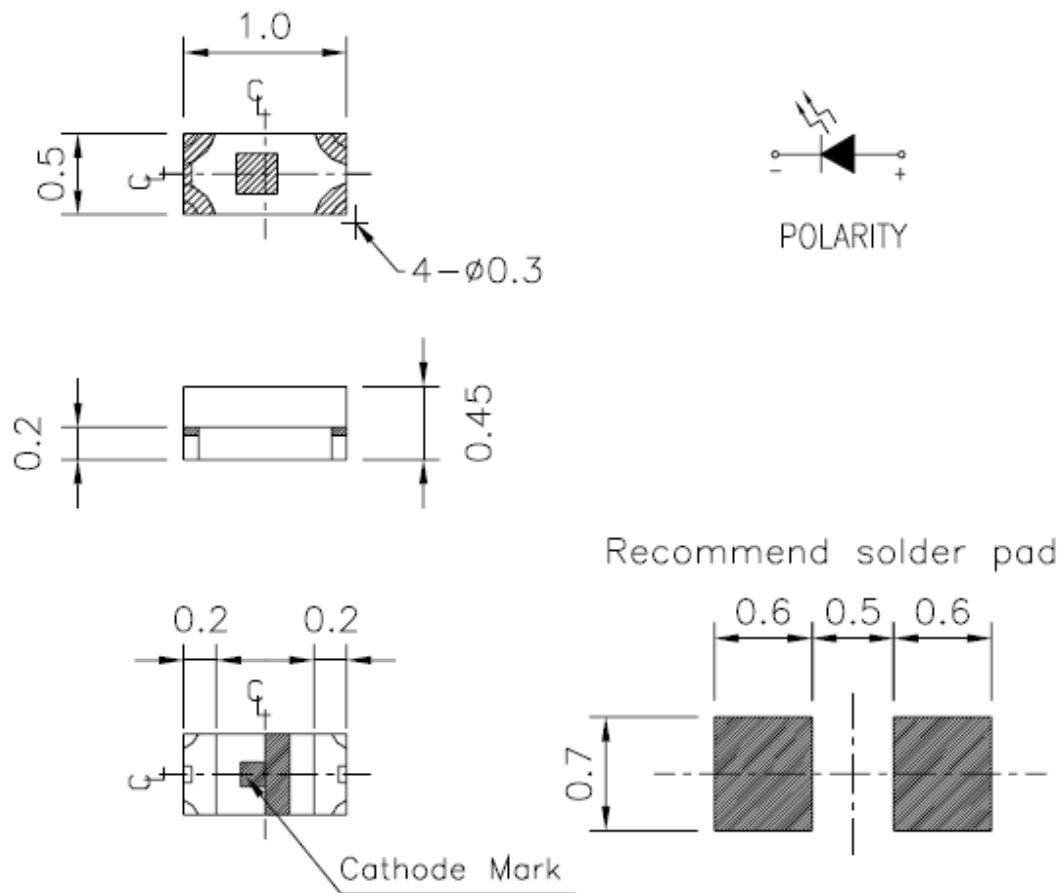
Typical Electro-Optical Characteristics Curves (Ta=25°C)



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Package Dimensions (Unit=mm)

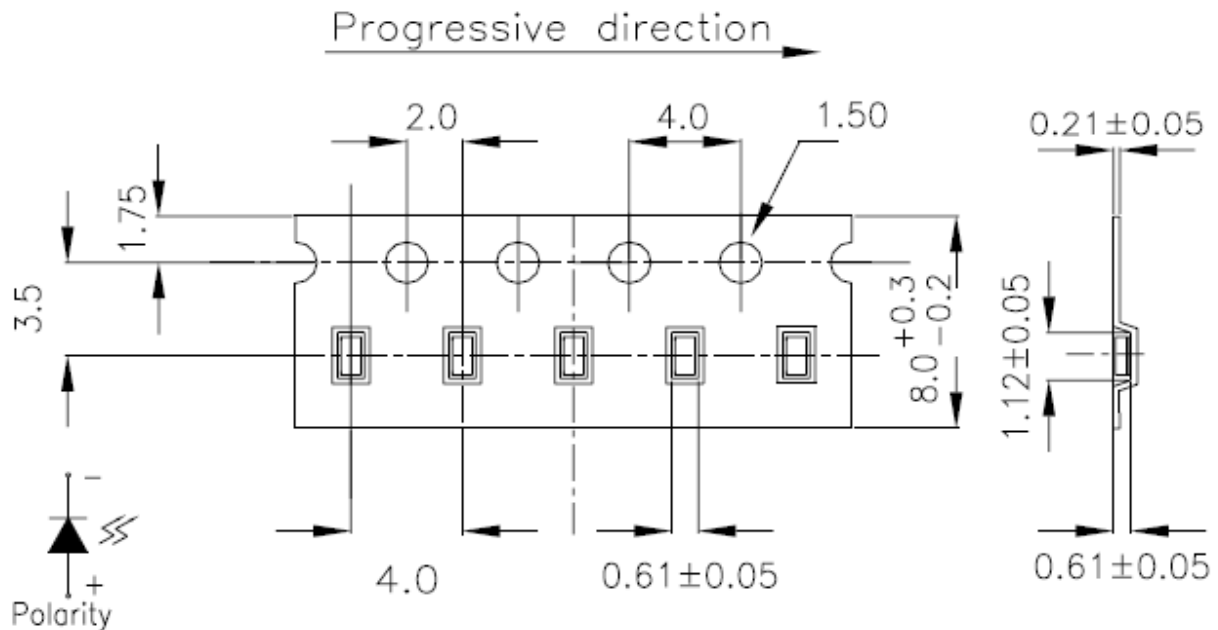


Note: The tolerances unless mentioned is ± 0.1 mm, Unit = mm

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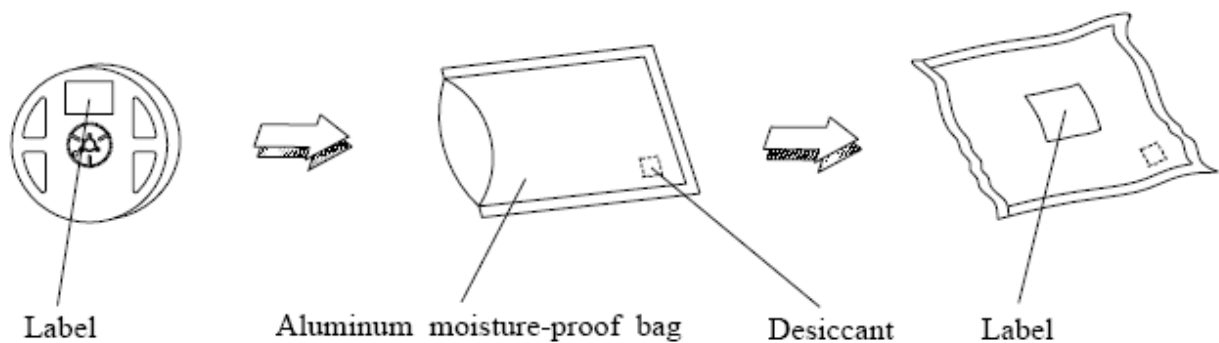
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Carrier Tape Dimensions (Unit=mm): Loaded quantity 3000pcs per reel



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$.

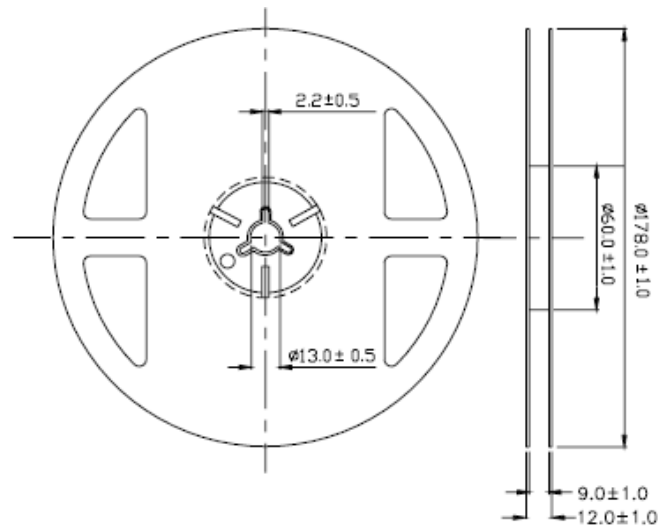
Moisture Resistant Packaging



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Reel Dimensions (Unit=mm)



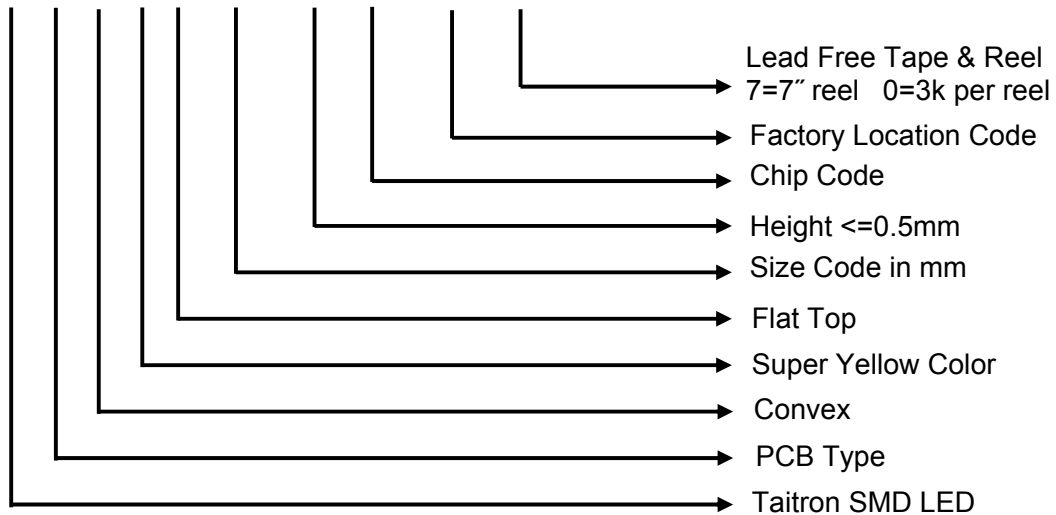
Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$.

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Ordering Information

TS P 1- X F 1005 H5 A6 - 92-TR70



Label Explanation

CAT: Luminous Intensity Rank

HUE: Dominant Wavelength Rank

REF: Forward Voltage Rank

CPN:	
P/N:	
	
	
QTY :	CAT:
	HUE:
LOT NO :	REF:
	

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How to contact us

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