

0805 Package Yellowish Green Flat Top 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



M2012



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

- Automotive: 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	
TSP2-FF2012E2	AlInGaP	Yellowish Green	Water Clear

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

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	

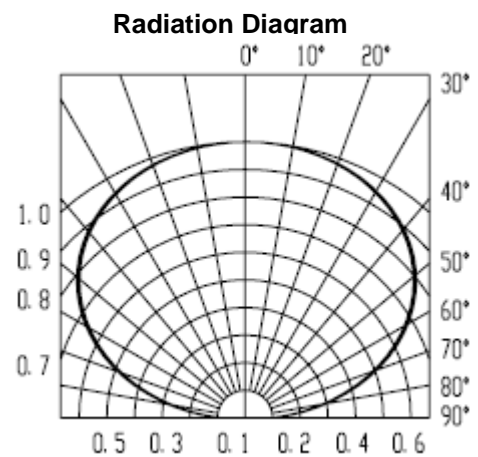
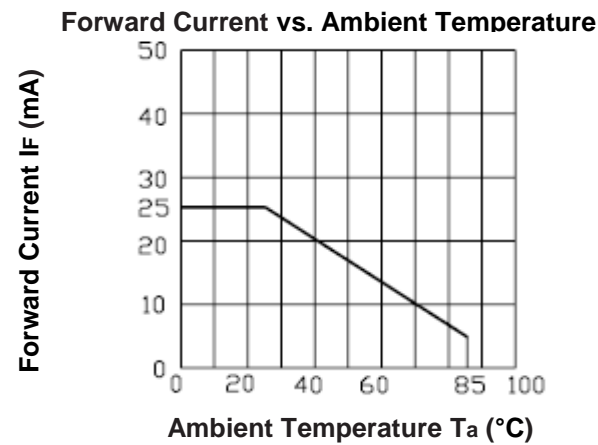
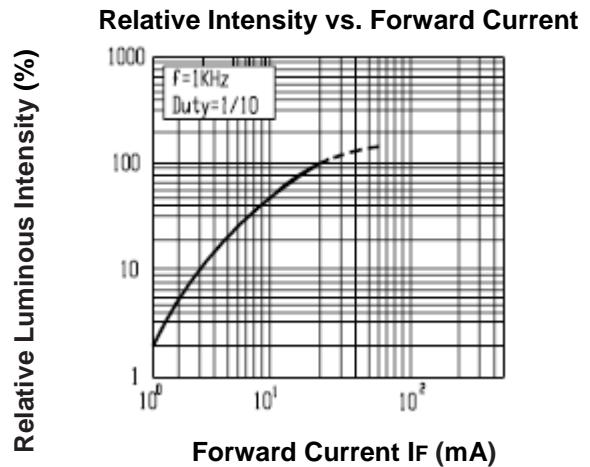
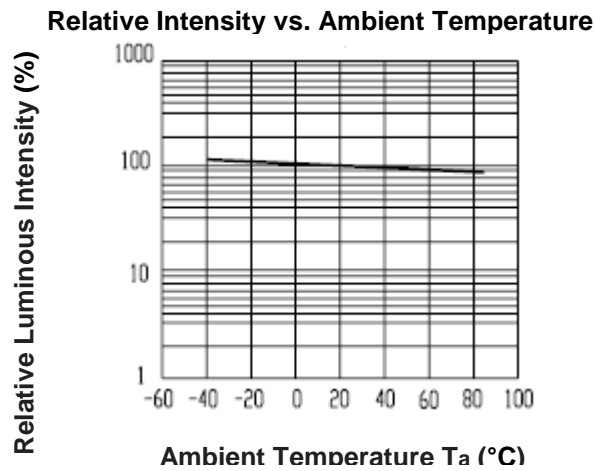
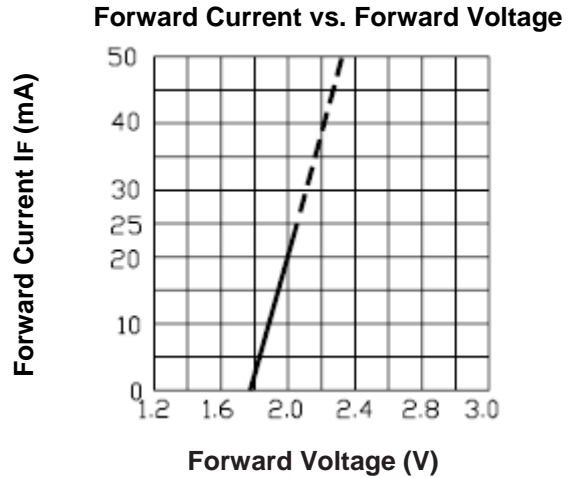
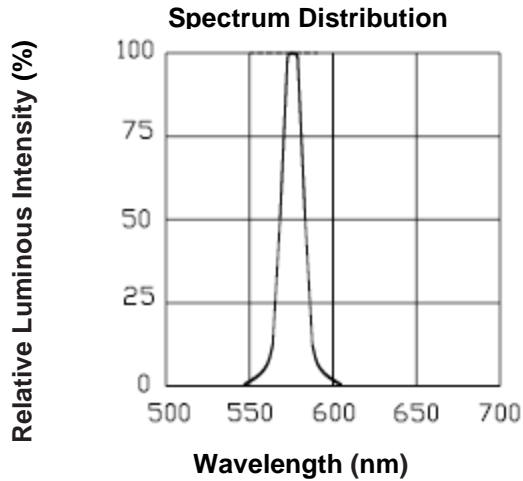
Electro-Optical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I_v	17	23	-----	mcd	I _F =20mA
Viewing Angle	2θ_{1/2}	-----	140	-----	deg	
Peak Wavelength	λ_p	-----	575	-----	nm	
Dominant wavelength	λ_d	-----	573	-----	nm	
Spectrum Radiation Bandwidth	Δ λ	-----	20	-----	nm	
Forward Voltage	V_F	1.7	2.0	2.4	V	
Reverse Current	I_R	-----	-----	10	μA	V _R =5V

Notes:

1. Tolerance of Luminous Intensity $\pm 10\%$
2. Tolerance of Dominant wavelength $\pm 1.0\text{nm}$
3. Tolerance of Forward Voltage: $\pm 0.1\text{V}$

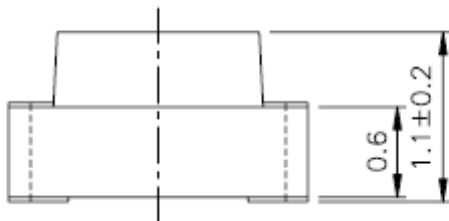
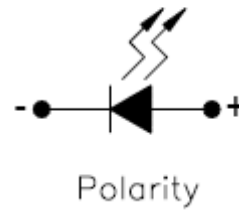
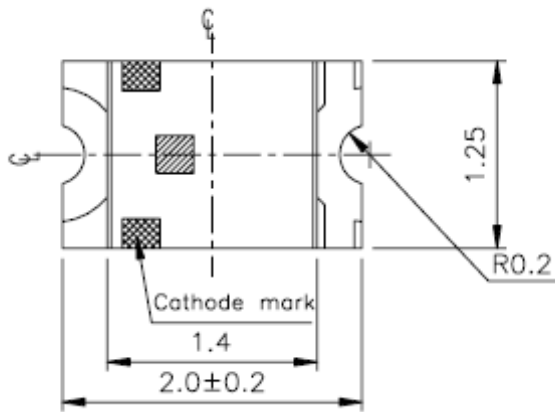
Typical Electro-Optical Characteristics Curves (Ta=25°C)



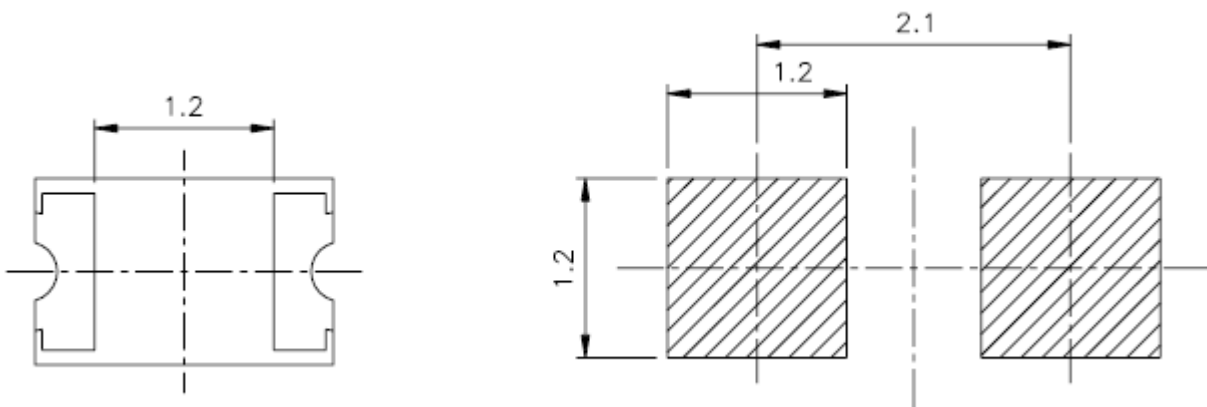
Yellowish Green Flat Top LED

TSP2-FF2012E2

Package Dimensions (Unit=mm)

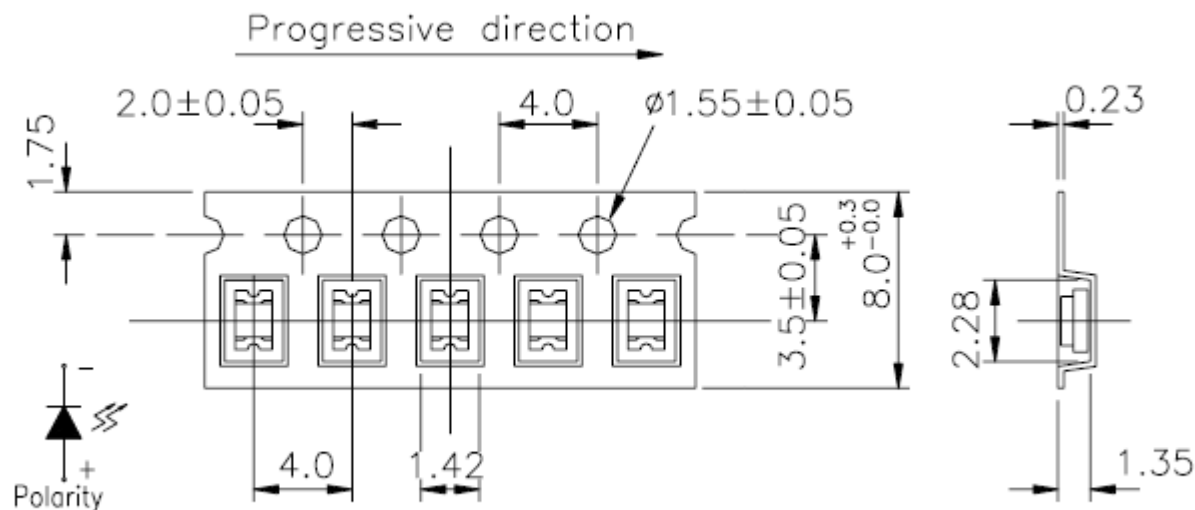


For reflow soldering (Propose)



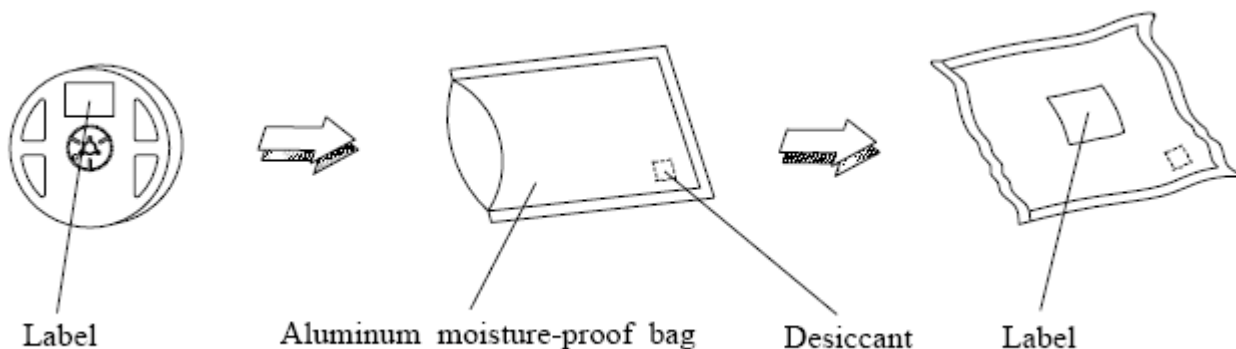
Note: The tolerances unless mentioned is ± 0.1 mm, Unit = mm

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

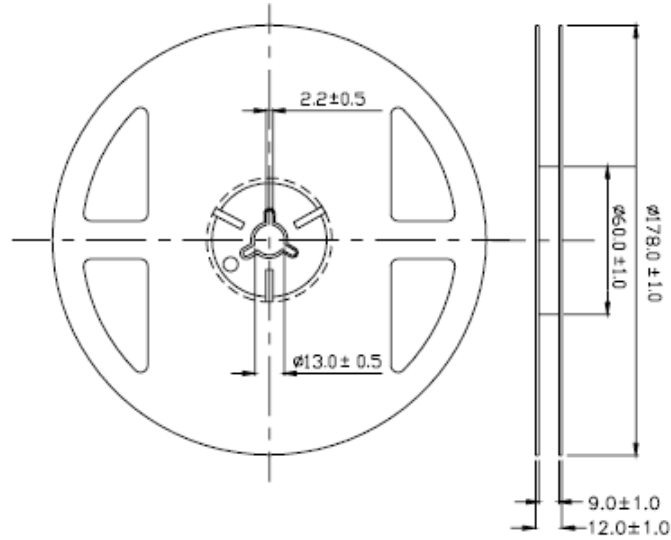


Note: The tolerances unless mentioned is ± 0.1 mm.

Moisture Resistant Packaging



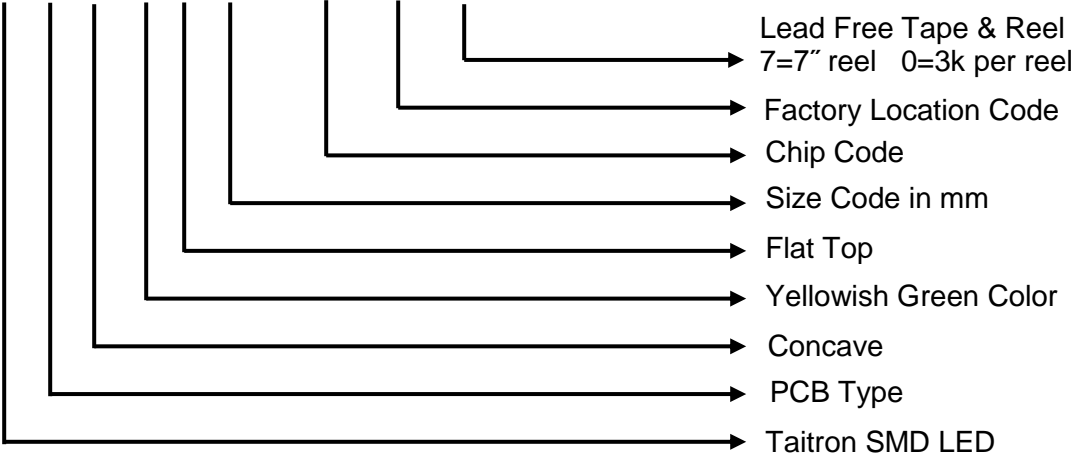
Reel Dimensions (Unit=mm)



Note: The tolerances unless mentioned is ± 0.1 mm.

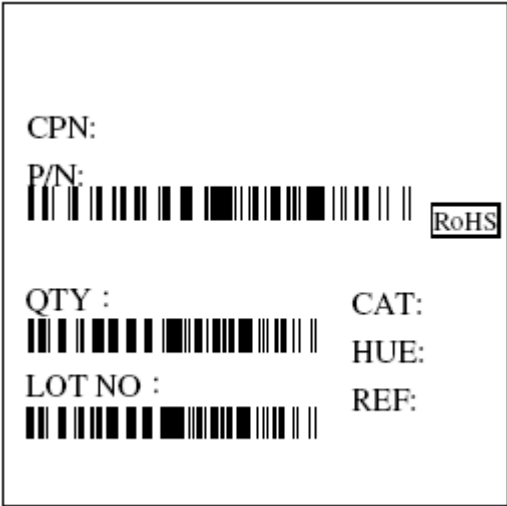
Ordering Information

TSP2-FF2012E2-92-TR70



Label Explanation

- CAT: Luminous Intensity Rank
- HUE: Dominant Wavelength Rank
- REF: Forward Voltage Rank



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