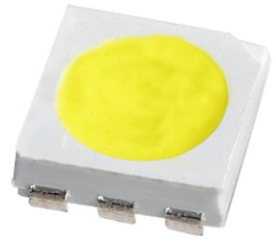


TSL-5050UW000MTH



FEATURES

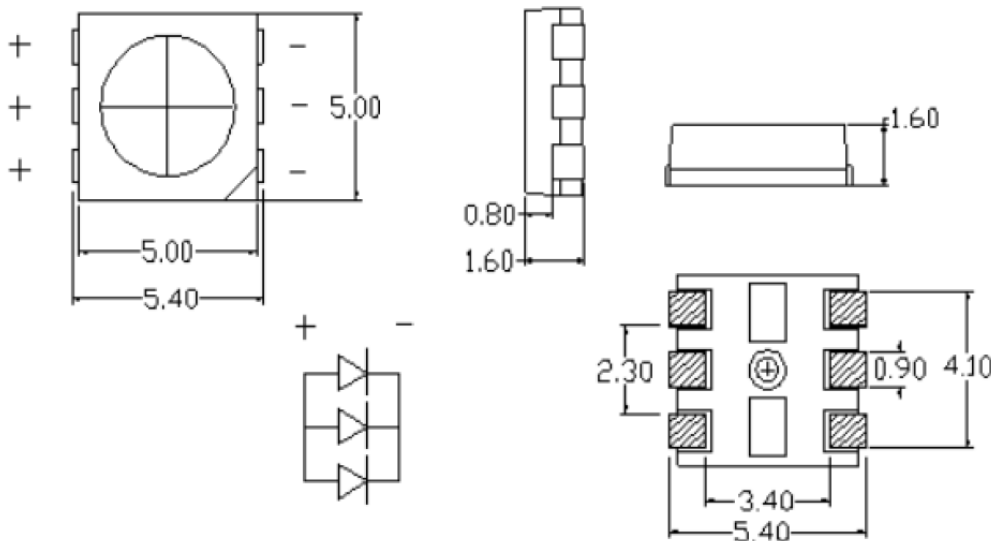
- Wide Viewing Angle 120°
- Reflow Solderable
- High Luminous Intensity and Low Power Dissipation
- Good Reliability and Long Life
- Complied With RoHS Directive

APPLICATIONS

- Optical indicator
- Indoor display
- Backlighting in dashboard and switch
- Flat Backlighting for LCD, symbol and display
- General use

TECHNICAL DATA SHEET

This product is generally used as indicator and luminary for electronic equipment such as household appliance, communication equipment and dashboard.



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is $\pm 0.2\text{mm}$ unless otherwise noted.

Selection Guide

Dice	Lens Type	Luminous intensity (mcd) @ 60mA			Viewing Angle
		Min	Typ	Max	
White (InGaN)	Yellow Diffused	24	25	26	2 ϕ 1/2 120

Note:

1. 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. The above luminous intensity measurement allowance tolerance $\pm 10\%$

Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max	Units	Test conditions
Forward Voltage	VF	2.8	3.2	3.6	V	IF=60mA
Reverse Current	IR	--	--	10	uA	VR=5V
Color Rendering Index	CRI	50	70/75/80	90		IF=60mA
Color Temperature	Tc	1900	6000/4000/3000	25000	K	IF=60mA

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Units
Power Dissipation	Pd	270	mW
DC Forward Current	IF	75	mA
Peak Forward Current 【1】	IFP	450	mA
Reverse Voltage	VR	5	V
Electrostatic Discharge (HBM)	ESD	± 2000	V
Operating Temperature	Topr	-30~+85	°C
Storage Temperature	Tstg	-40~+100	°C

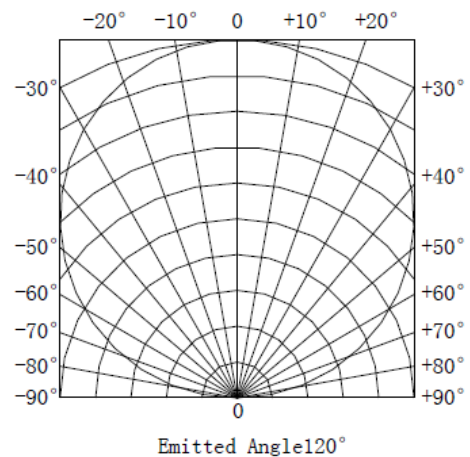
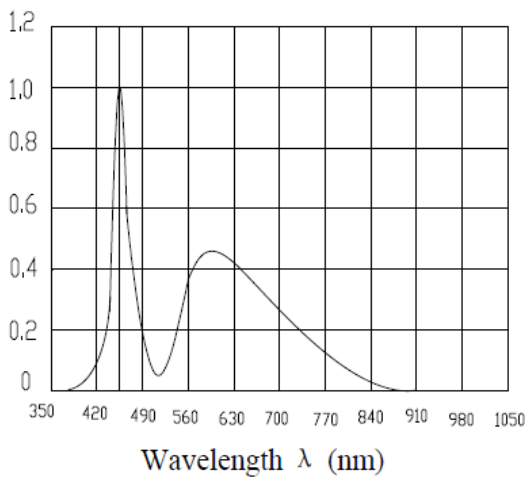
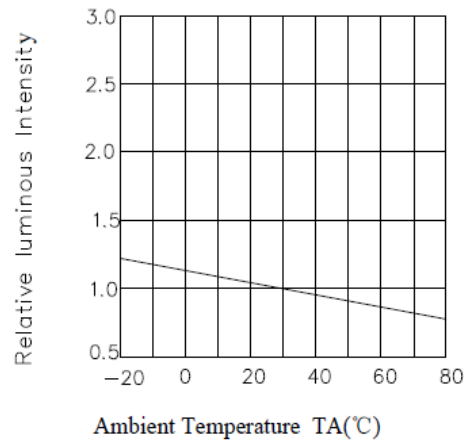
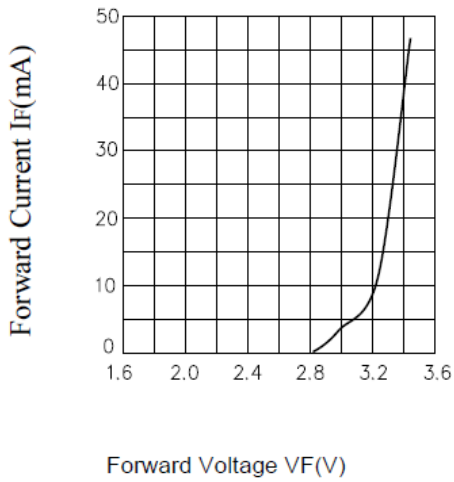
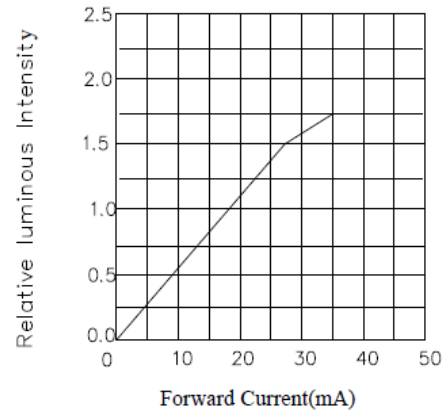
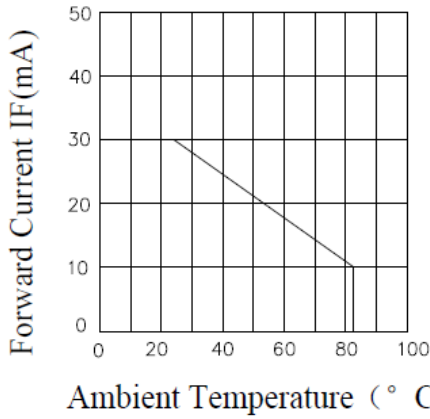
Note:

1. 1/10 Dut cycle, 0.1ms pulse width.
2. The above forward voltage measurement allowance tolerance $\pm 0.1\text{V}$.

TSL-5050UW000MTH

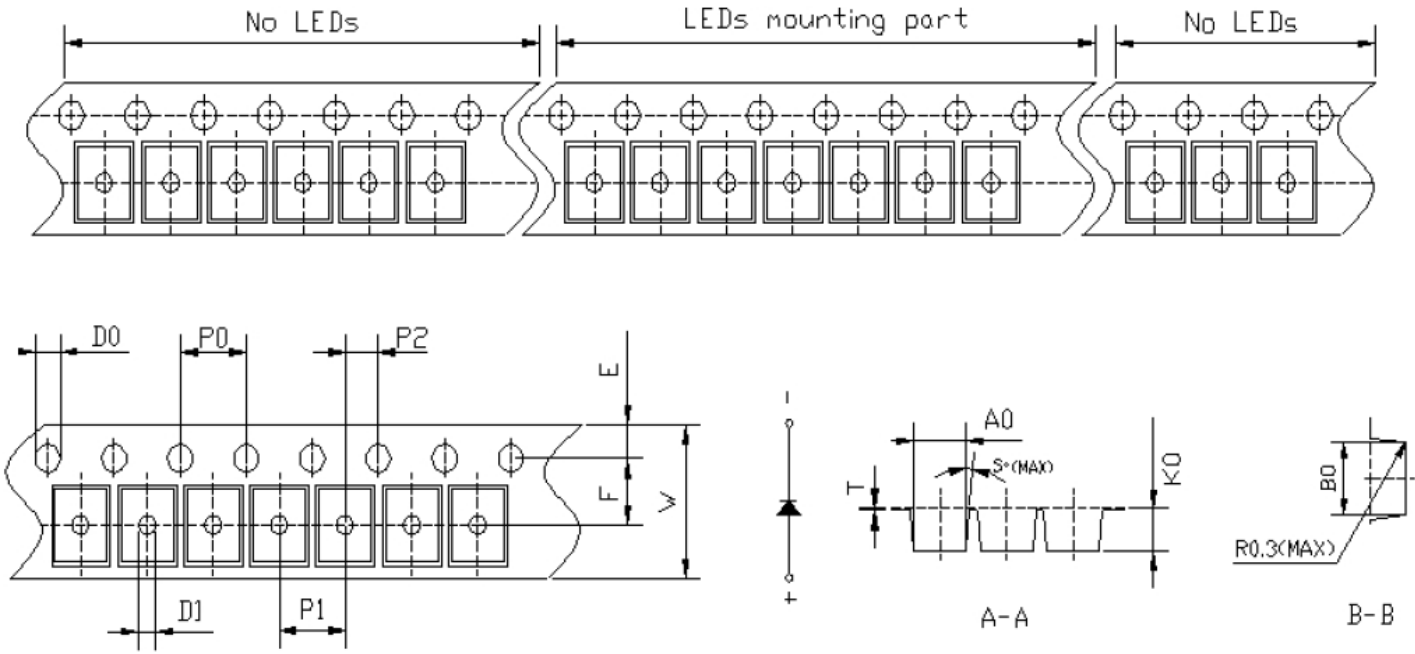
Typical Optical Characteristics Curves

Ambient Temperature VS. Forward Current



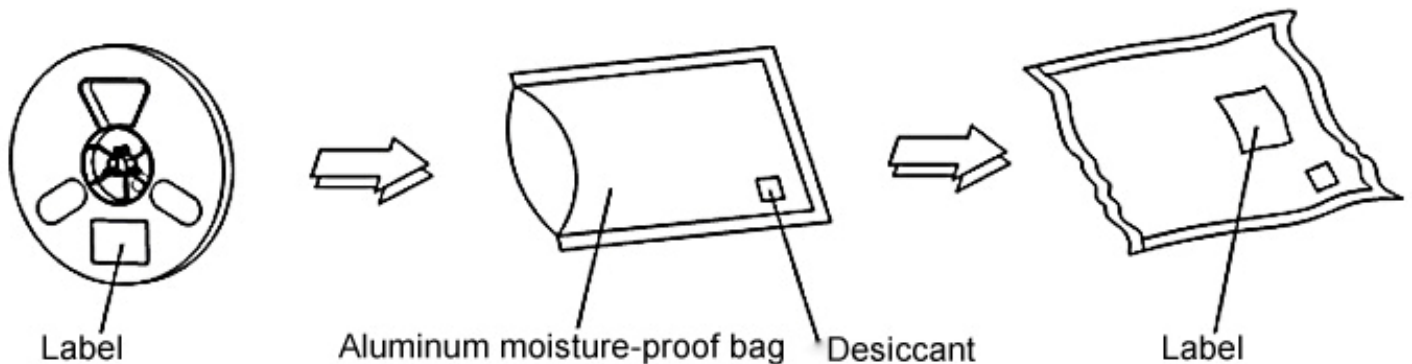
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Carrier Tape



Symbol	A0	B0	K0	P0	P1	P2	Model	Unit
Spec	5.35±0.10	5.70±0.10	1.80±0.10	4.00±0.10	8.00±0.10	2.00±0.10		
Symbol	W	T	E	F	D0	D1		
spec	12.00±0.10	0.3±0.05	1.75±0.10	5.50±0.10	1.50 +0.10 -0.00	1.50 +0.10 -0.00		

Moisture Resistant Packaging



Note: Specification are subject to change without notice. For more detail and update, please visit our website.