

# TSL-5050UB000MTH



## FEATURES

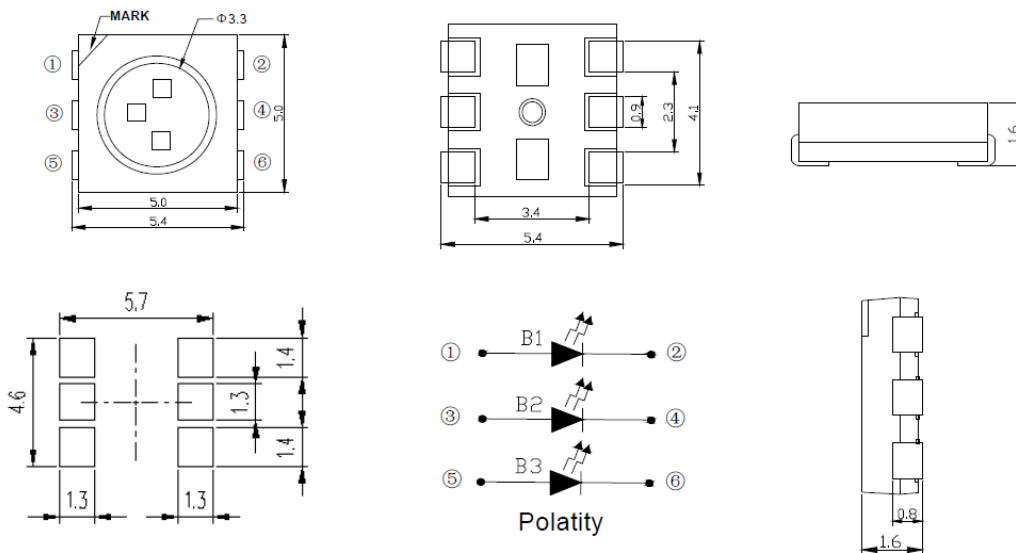
- Wide Viewing Angle 120°
- Reflow Solderable
- High Luminous Intensity and Low Power Dissipation
- Good Reliability and Long Life
- Complied With RoHS Directive

## 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  $\pm 0.2$ mm unless otherwise noted.

## Selection Guide

Dice	Lens Type	Luminous intensity (mcd) @ 20mA			Viewing Angle
		Min (B/B/B)	Typ (B/B/B)	Max (B/B/B)	
Blue (InGaN)	Water Clear	100/ 100/ 100	300/ 300/ 300	600/ 600/ 600	2 $\phi$ 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. (B/B/B)	Typ. (B/B/B)	Max (B/B/B)	Units	Test conditions
Forward Voltage	VF	2.8/ 2.8/ 2.8	3.2/ 3.2/ 3.2	3.6/ 3.6/ 3.6	V	IF=20mA
Reverse Current	IR	--	--	10	uA	VR=5V
Dominant Wavelength	$\lambda_d$	463	--	475	nm	IF=20mA

## Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Units
Power Dissipation	Pd	160	mW
DC Forward Current	IF	25	mA
Peak Forward Current 【1】	IFP	100	mA
Reverse Voltage	VR	5	V
Electrostatic Discharge (HBM)	ESD	$\pm 1000$	V
Operating Temperature	Topr	-30~+85	°C
Storage Temperature	Tstg	-40~+100	°C

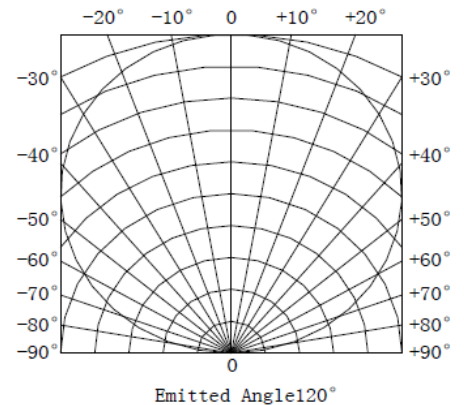
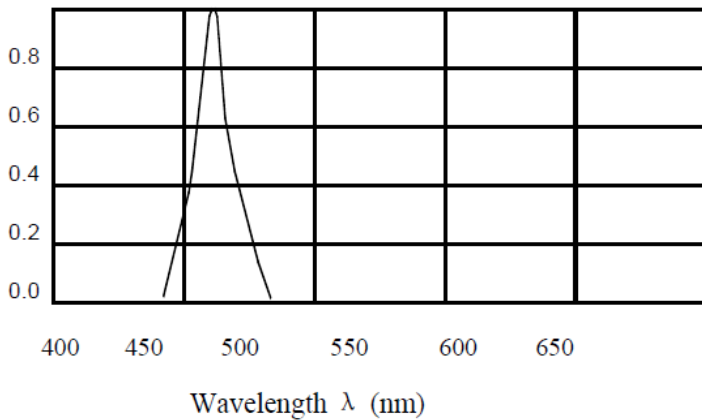
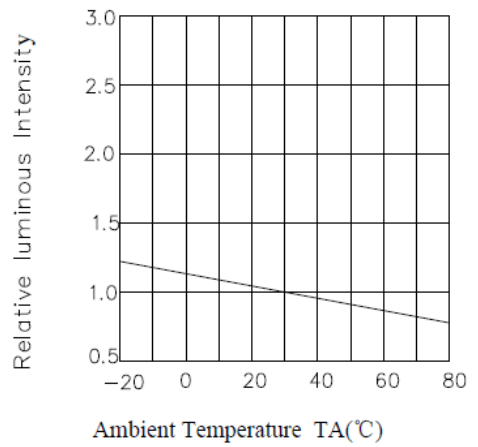
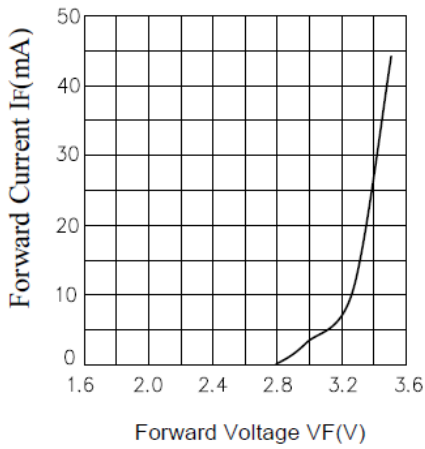
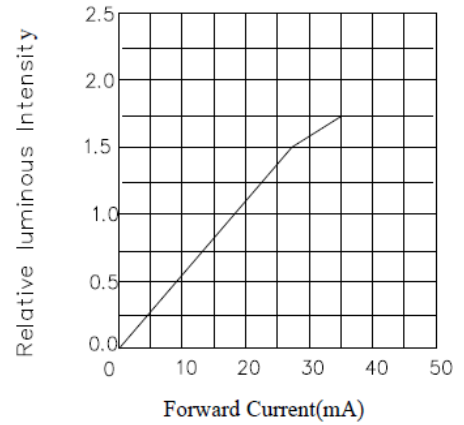
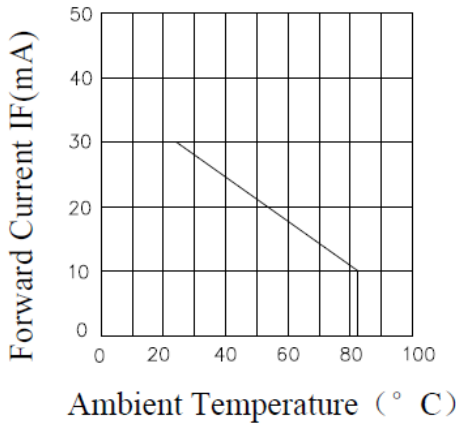
Note:

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

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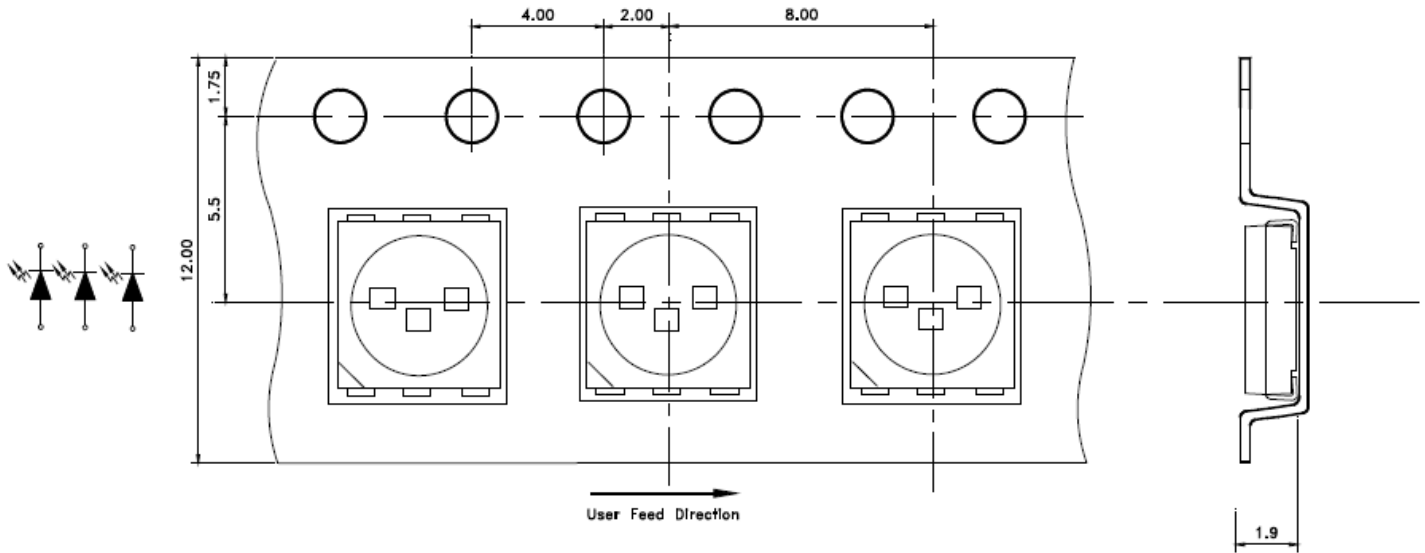
## Typical Optical Characteristics Curves

Ambient Temperature VS. Forward Current

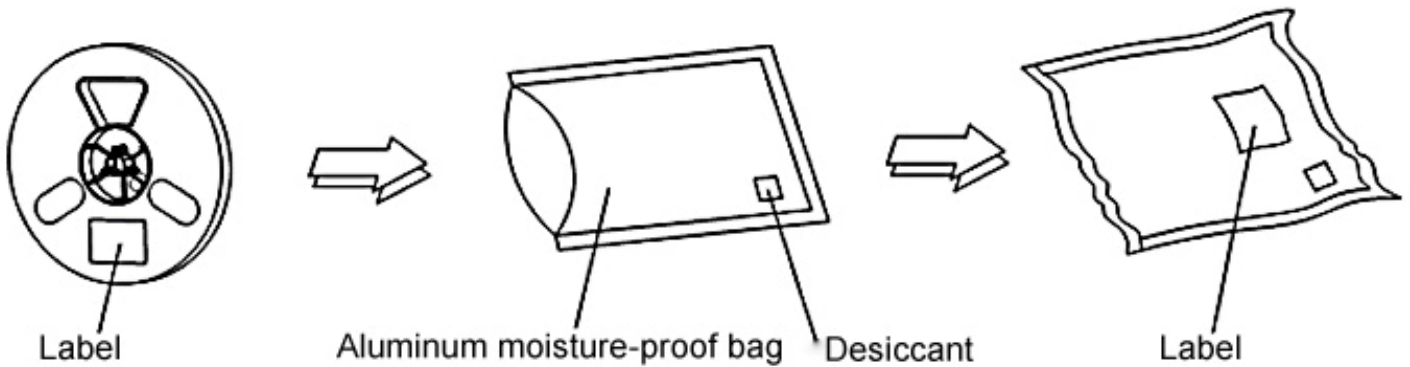


# TSL-5050UB000MTH

## Carrier Tape



## Moisture Resistant Packaging



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