



广州市东裕光电科技有限公司

产品规格书

SPECIFICATION

客户名称 CUSTOMER	
产品名称 PRODUCTION	反射式光电开关 Reflective Sensor
产品型号 MODEL	DYWH-ITR8307/S17B1B2/1T
版本号 VERSION NO	A1.0

厂址(Add): 广东省广州市番禺区石基镇海涌路3号10号厂房2楼

电话(Tel): 18038161512

传真(Fax): 020-39966833

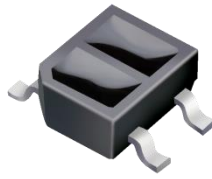
网址(Net): www.tonyuled.cn www.tonyuled.com



客户确认 CUSTOMER CONFIRMATION	审 核 CHECKED BY	编 制 PREPARED BY
	邓晓军	区家俊



DYWH-ITR8307/S17B1B2/1T



Features

- Fast response time
- High sensitivity
- Cut-Off visible wavelength
- Thin
- Compact
- Pb free
- This product itself will remain within RoHS compliant version.
- Compliance with EU REACH.
- Compliance Halogen Free .(Br <900 ppm ,Cl <900 ppm , Br+Cl < 1500 ppm).

Description

DYWH-ITR8307/S17B1B2/1T is a light reflection switch which includes a GaAs IR-LED transmitter and a NPN photo-transistor with a high photosensitive receiver for short distance, operating in the infrared range. Both components are mounted side- by- side in a plastic package.

Applications

- Camera
- VCR
- Floppy disk driver
- Cassette type recorder
- Various microcomputer control equipment

Device Selection Guide

Device No.	Chip Material
IR	GaAlAs
PT	Silicon

Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit
Input	Power Dissipation at(or below) 25°C Free Air Temperature	Pd	75	mW
	Reverse Voltage	V _R	5	V
	Forward Current	I _F	50	mA
	Peak Forward Current (*1) Pulse width ≤100μs, Duty cycle=1%	I _{FP}	1	A
Output	Collector Power Dissipation	P _C	75	mW
	Collector Current	I _C	50	mA
	Collector-Emitter Voltage	B V _{CEO}	30	V
	Emitter-Collector Voltage	B V _{ECO}	5	V
Operating Temperature		Topr	-25~+85	°C
Storage Temperature		Tstg	-30~+90	°C
Lead Soldering Temperature (*2) (1/16 inch form body for 5 seconds)		Tsol	260	°C

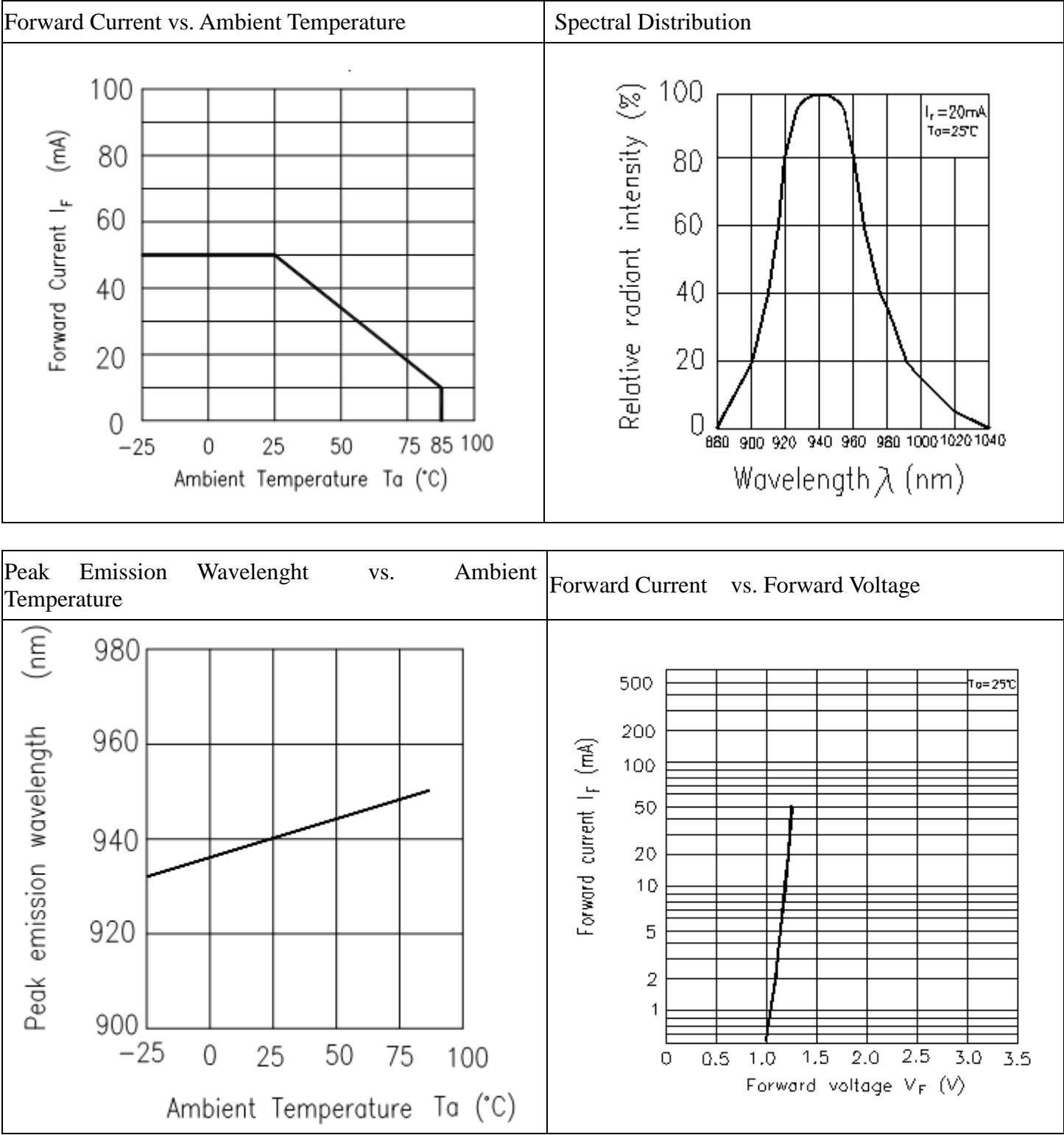
Notes: (*1) tw=100 μsec. , T=10 msec. (*2) t=5 Sec

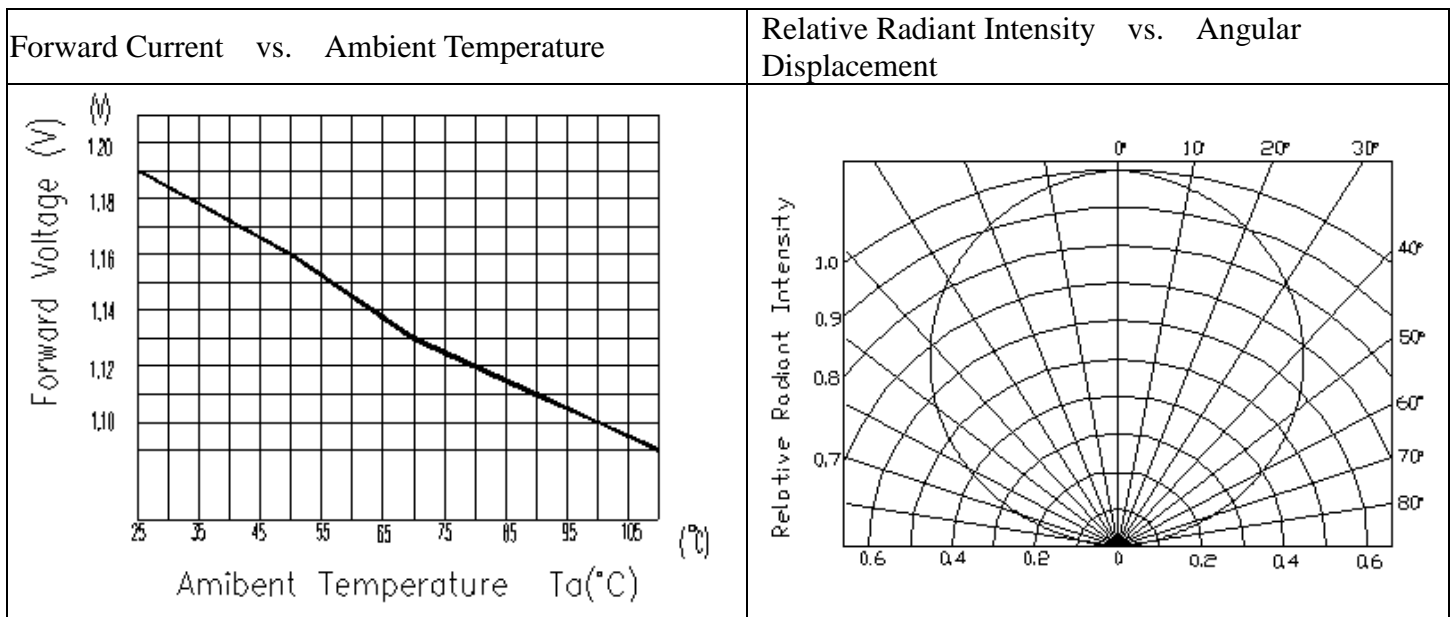
Electro-Optical Characteristics (Ta=25°C)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Input	Forward Voltage	V _F	---	1.2	1.6	V	I _F =20mA
	Reverse Current	I _R	---	---	10	μ A	V _R =5V
	Peak Wavelength	λ _P	---	940	---	nm	---
Output	Dark C urrent	I _{CEO}	---	---	100	nA	V _{CE} =10V
	C-E Saturation Voltage	V _{CE(sat)}	---	---	0.4	V	I _C =2mA ,Ee=1mW/cm ²
Transfer Characteristics	Light Current	I _{C(ON)}	0.18	---	0.30	mA	V _{CE} =5V, I _F =10mA
	Leakage Current	I _{CEOD}	---	---	1	μ A	
	Rise time	t _r	---	20	---	μ sec	V _{CE} =2V,I _C =100 μ A R _L =1KΩ
	Fall time	t _f	---	20	---	μ sec	

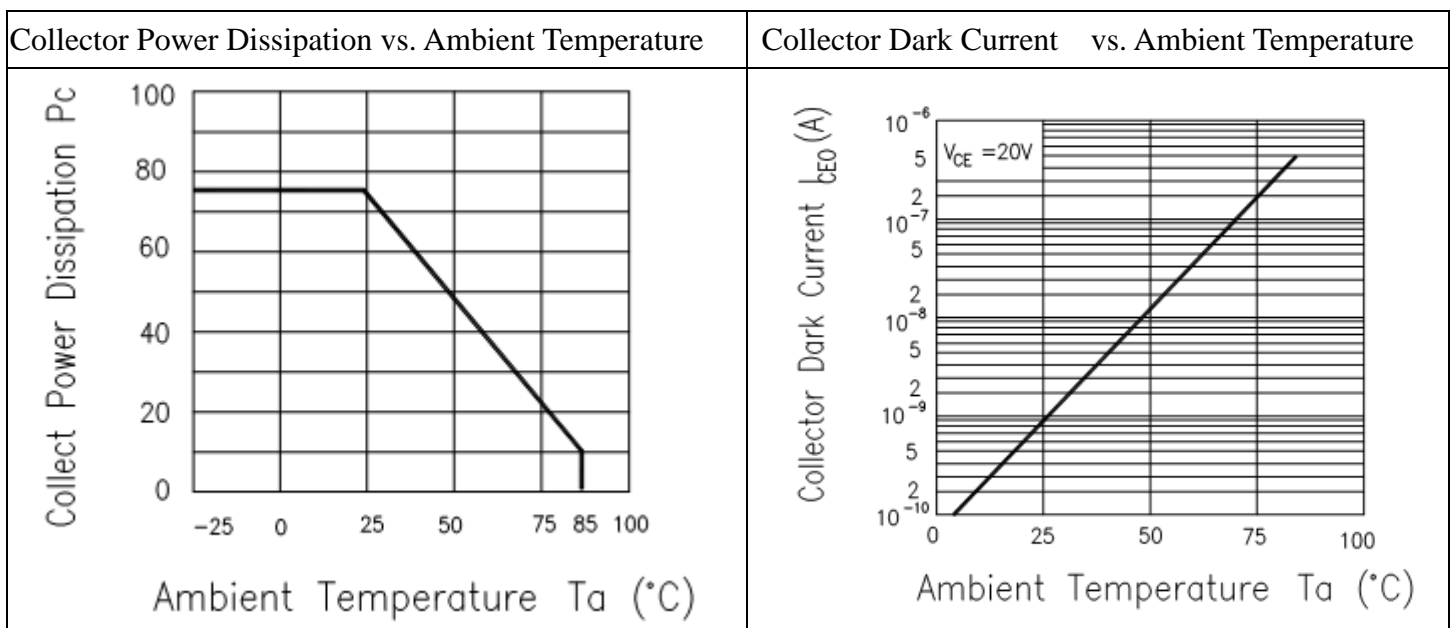


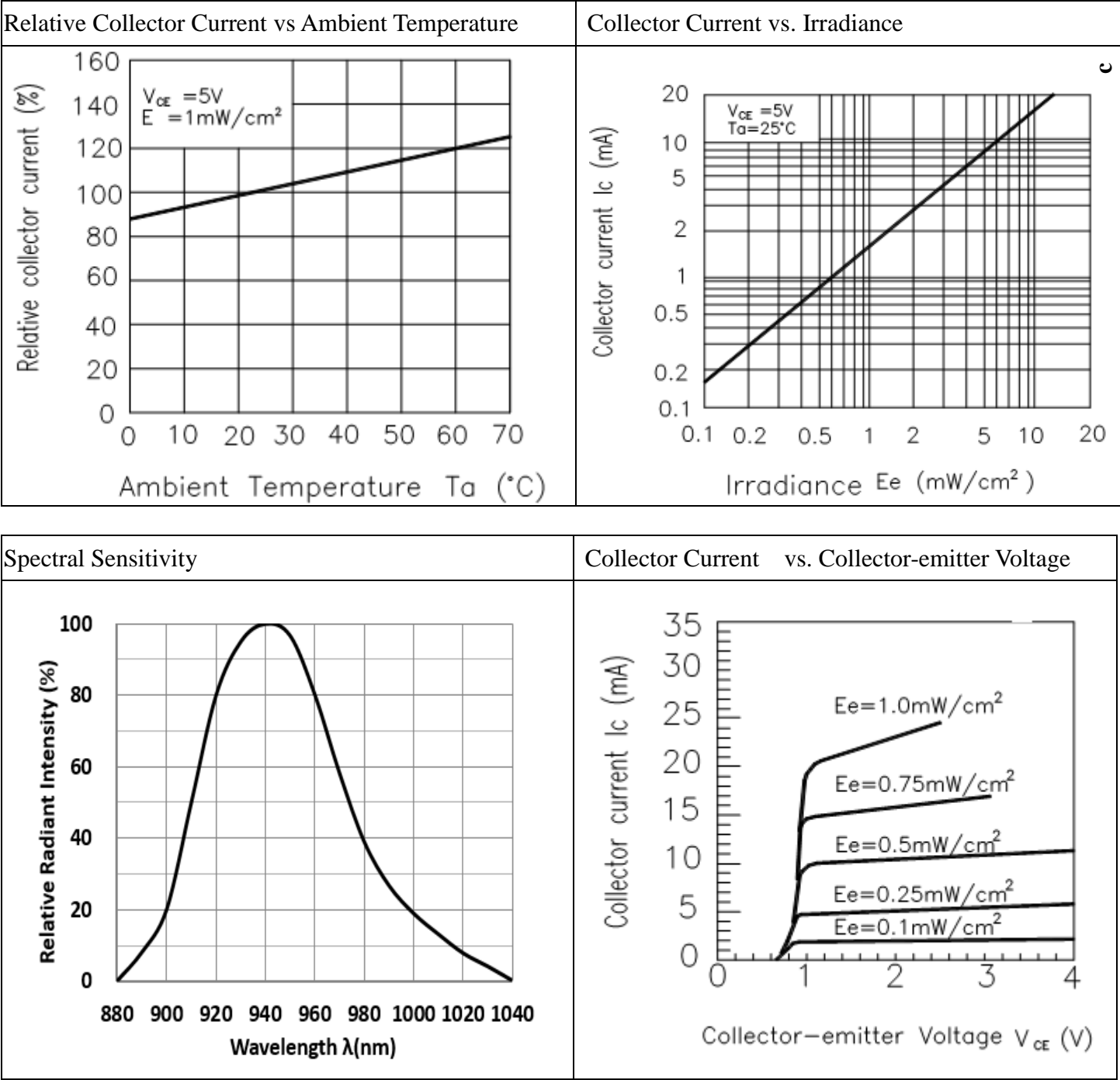
Typical Electrical/Optical/Characteristics Curves for IR





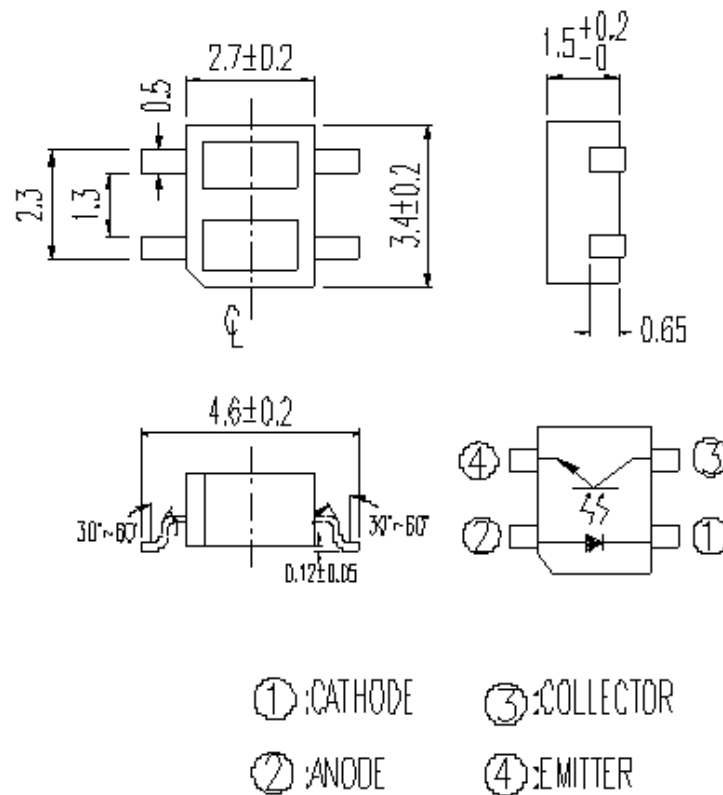
Typical Electro/Optical/Characteristics Curves for PT







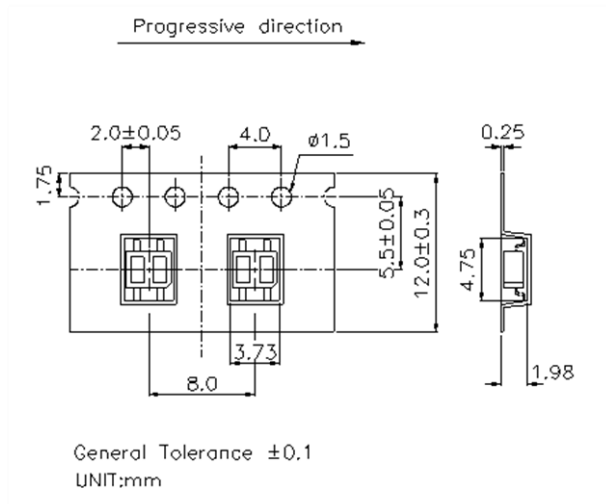
Package Dimension



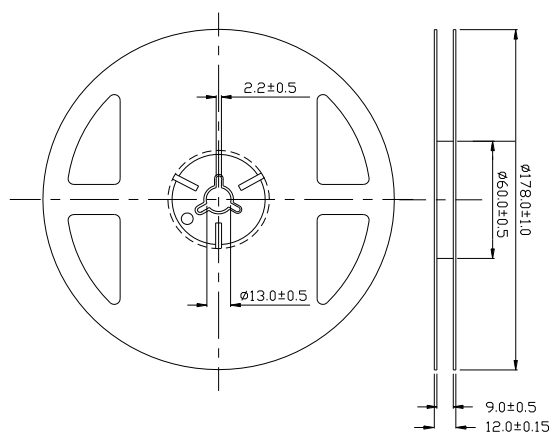
Notes:

1. All dimensions are in millimeters
2. Tolerances unless dimensions ± 0.15 mm
3. Lead spacing is measured where the lead emerge from the package
4. Above specification may be changed without notice. TONYU will reserve authority on material change for above specification
5. These specification sheets include materials protected under copyright of TONYU corporation . Please don't reproduce or cause anyone to reproduce them without TONYU's consent
6. When using this product , please observe the absolute maximum ratings and the instructions for use outlined in these specification sheets. TONYU assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.

Taping Dimension:

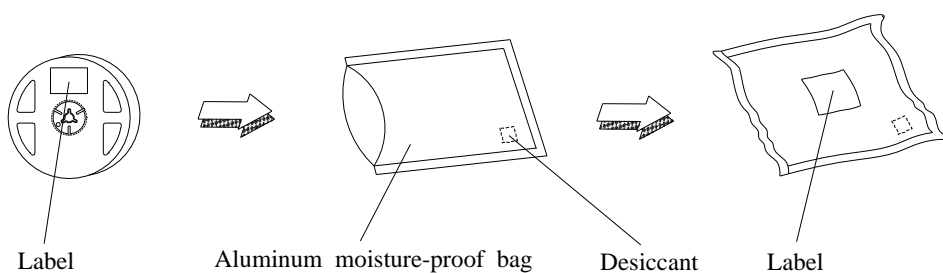


Reel Dimensions



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

Moisture Resistant Packaging



Packing Quantity Specification

1. 1000 Pcs/ 1Reel
2. 15 Reel /1 Box
3. 2 Box/ 1 Carton



DISCLAIMER

1. TONYU reserves the right(s) on the adjustment of product material mix for the specification.
2. The product meets TONYU published specification for a period of twelve (12) months from date of shipment.
3. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
4. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. TONYU assumes no responsibility for any damage resulting from the use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
5. These specification sheets include materials protected under copyright of TONYU. Reproduction in any form is prohibited without obtaining TONYU's prior consent.
6. This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or life saving applications or any other application which can result in human injury or death. Please contact authorized TONYU sales agent for special application request.