

SMD Photo Transistor

BL-LS2012A0E1PT

Features:

- 2.0mmx1.2mm SMD Type photo-transistor
- High Reliability
- High photo sensitivity
- Water Clear, black available
- Fast response time



Application

- Infrared applied system
- Smoke detector
- Infrared Camera
- Printer
- Optoelectronic switch
- Infrared applied system

Electrical-optical characteristics: (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Rang Of wavelength	$\lambda^{0.5}$	760	---	1100	nm	---
Peak Wavelength	λ^P	---	940	---	nm	---
Collector – Emitter Breakdown Voltage	BV^{CEO}	30	---	---	V	$I^C=100\mu A$ $E^e=0mW/cm^2$
Emitter-Collector Breakdown Voltage	BV^{ECO}	5	---	---	V	$I^E=100\mu A$ $E^e=0mW/cm^2$
Collector-Emitter Saturation Voltage	$V^{CE(sat)}$	---	---	0.8	V	$I^C=2mA$ $E^e=1mW/cm^2$
Rise Time	t^r	---	15	---	μS	$V^{CE}=5V$ $I^C=1mA$
Fall Time	t^f	---	15	---		$R^L=1000\Omega$
Collector Dark Current	I^{CEO}	---	---	100	nA	$E^e=0mW/cm^2$ $V^{CE}=20V$
On State Collector Current	$I^{C(on)}$	0.2	0.4	---	mA	$E^e=1mW/cm^2$ $V^{CE}=5V$

Absolute maximum ratings (Ta=25°C)

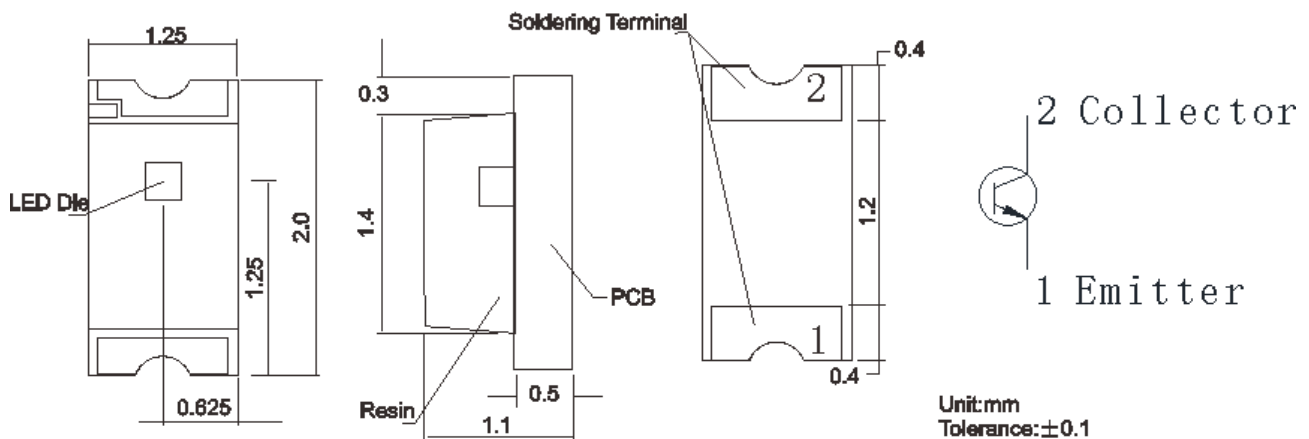
Parameter	Rating	Unit
Collector-Emitter Voltage V_{ce0}	30	V
Emitter-Collector Voltage V_{eco}	5	V
Power Dissipation P_d	100	mW
Reverse Voltage V_R	5	V
Operation Temperature T_{OPR}	-40 to +80	°C
Storage Temperature T_{STG}	-40 to +85	°C
Lead Soldering Temperature $TSOL$	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)	°C

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■ **Package configuration & Internal circuit diagram**

**BL-LS2012A0E1
Package Outline Drawing**



Recommended Soldering Pad Dimensions



Notes:

1. All dimensions are in millimeters (inches)
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.

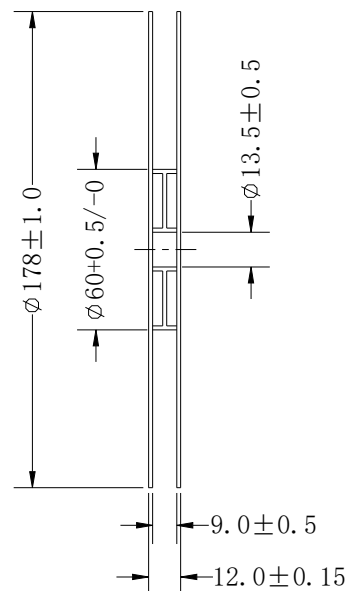
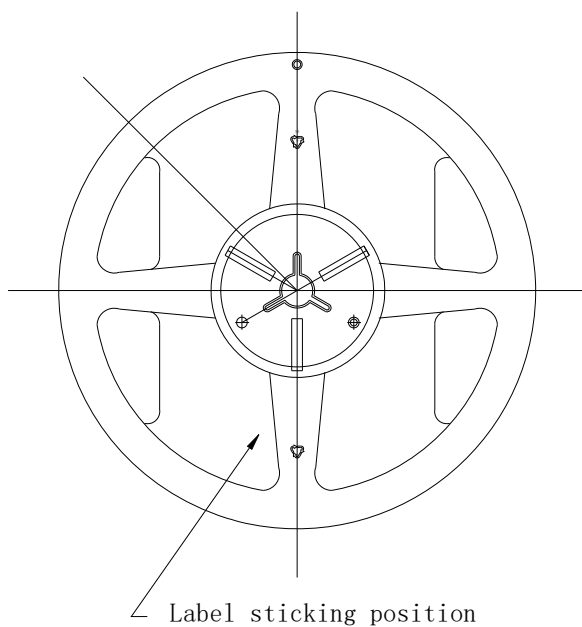
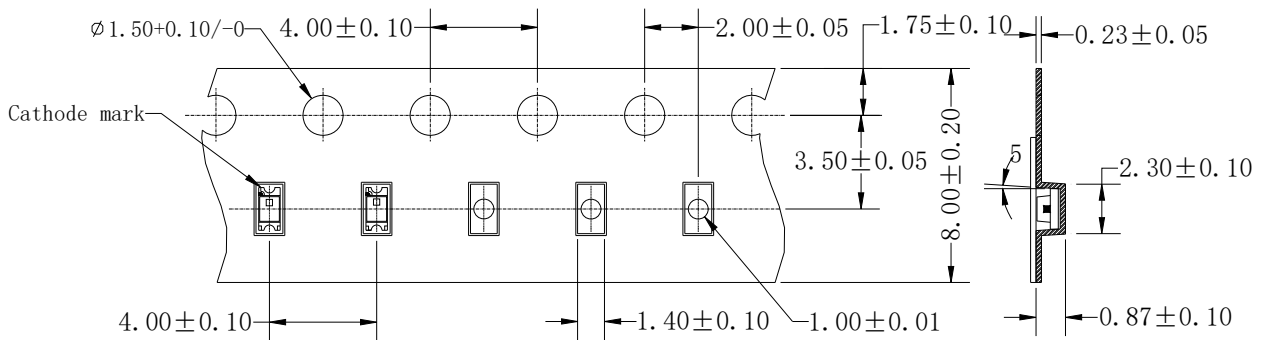
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■ **Tape Specifications**

Unit: mm

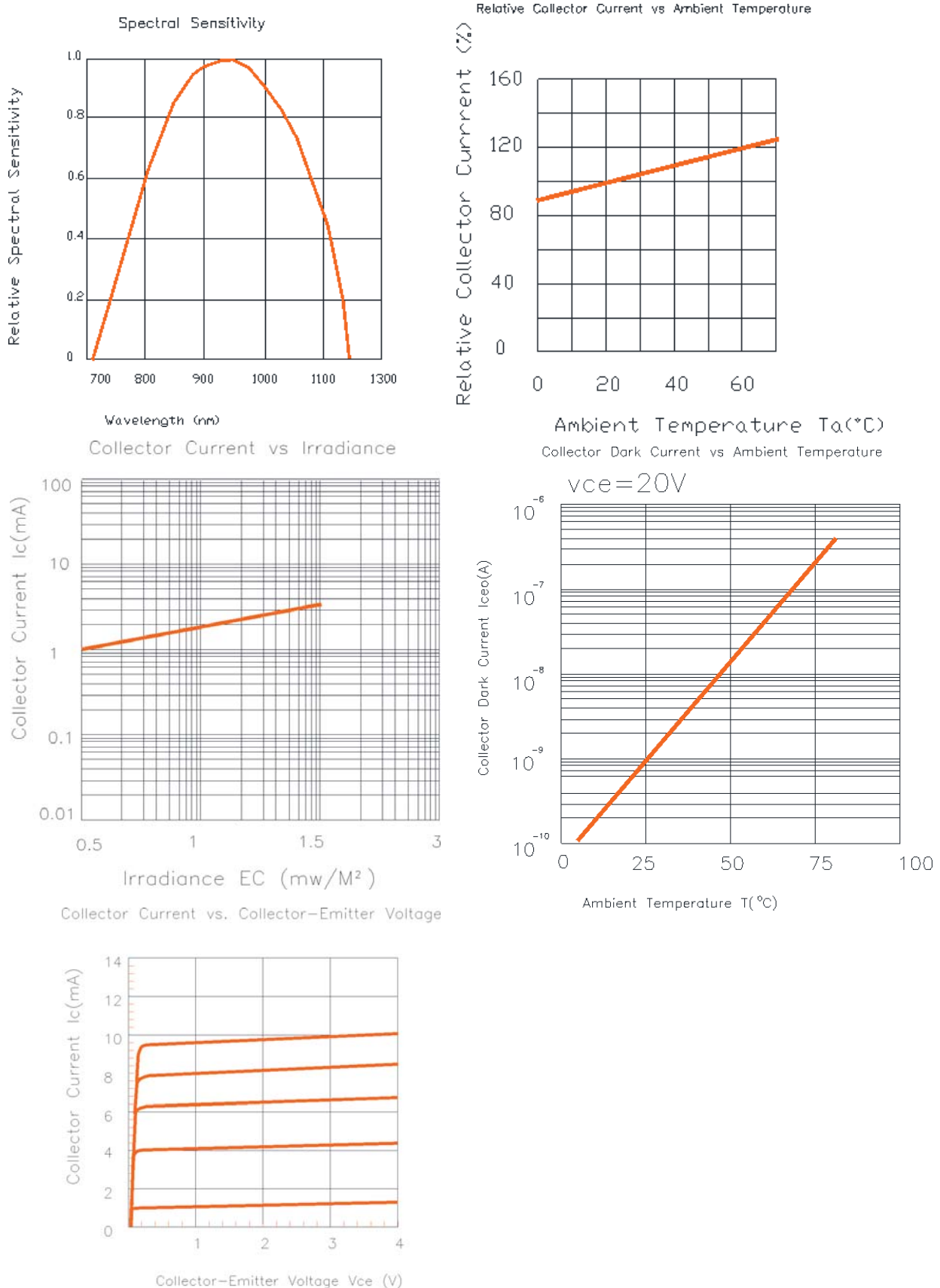
Tolerance: ± 0.1



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■ **Typical electrical-optical characteristics curves:**



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■ **Packing and weighting**

