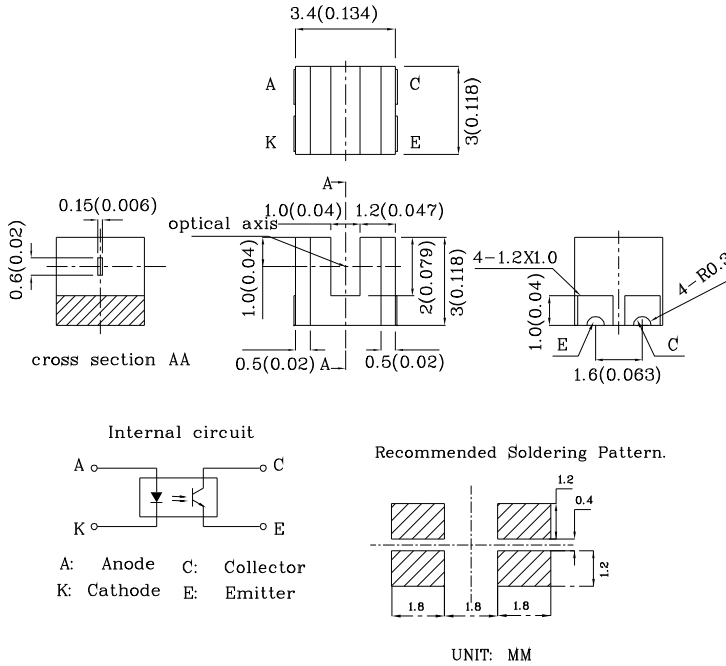


PCB TYPE PHOTOINTERRUPTER

*Dimensions

Note: All units are in millimeters unless otherwise indicated.



*Features

- 1.Ultra-compact with a 3.4mm width photointerrupter and 1mm width slot.
- 2.PCB surface mounting type.
- 3.High resolution with a 0.15mm width aperture.
- 4.RoHS compliant.

*Absolute Maximum Ratings (TA=25°C)

Parameter		Symbol	Rating	Unit
Input	Forward current[1]	IF	25	mA
	Reverse voltage	VR	5	V
	Power dissipation	Pd	35	mW
Output	Collector-emitter voltage	VCEO	20	V
	Emitter-collector voltage	VECO	5	V
	Collector current	IC	20	mA
	Collector power dissipation	PC	75	mW
Operating temperature		Topr	-35~+85	°C
Storage temperature		Tstg	-40~+90	°C
Reflow soldering[2]		Tsol	240	°C
Manual soldering[2]		Tsol	300	°C

Unless otherwise specified, the tolerances are ± 0.15 mm.

Notes:

- 1.Refer to the temperature rating chart if the ambient temperature exceeds 25°C.
- 2.Complete soldering within 10 seconds for reflow soldering and within 3 seconds for manual soldering.

Electrical / Optical Characteristics at TA=25°C

Parameter		Symbol	Min.	Typ.	Max.	Condition
Input	Forward voltage	VF	-	1.1V	1.3V	IF=5mA
	Reverse current	IR	-	-	10 μ A	VR=5V
	Peak emission wavelength	λp	-	940nm	-	-
Output	Collector current	IC	50 μ A	150 μ A	-	IF=5mA, VCE=5V
	Collector dark current	ID	-	-	100nA	VCE=10V
	Collector-Emitter saturation voltage	VCE(sat)	-	0.1V	0.4V	IC=50 μ A IF=20mA
	Peak spectral sensitivity wavelength	λp	-	920nm	-	-
Rise time	tr	-	8 μ Sec	-	VCC=5V RL=1k Ω IC=100 μ A	
Fall time	tf	-	10 μ Sec	-		

Fig.1 Forward Current vs. Forward Voltage

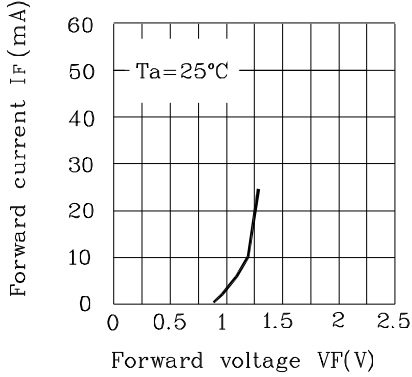


Fig.2 Collector Current vs. Forward Current

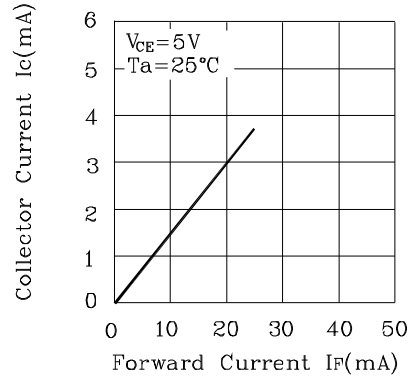


Fig.3 Collector Current vs. Ambient Temperature

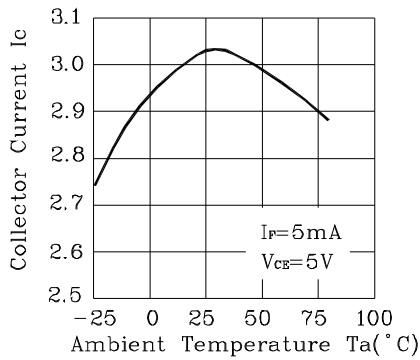


Fig.4 Collector-Emitter Saturation Voltage vs. Ambient Temperature

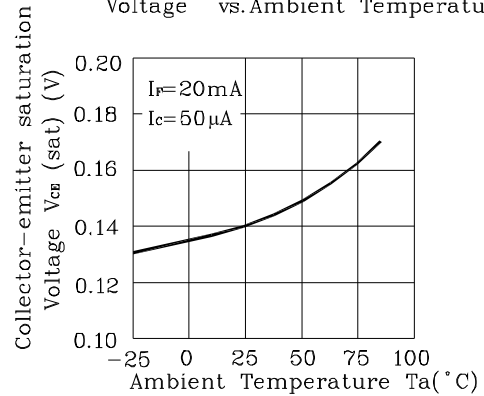


Fig.5 Forward Current vs. Collector Dissipation Temperature Rating

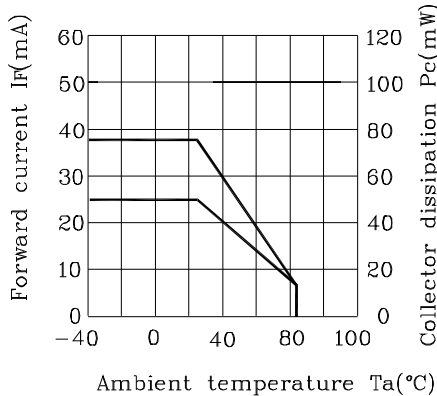
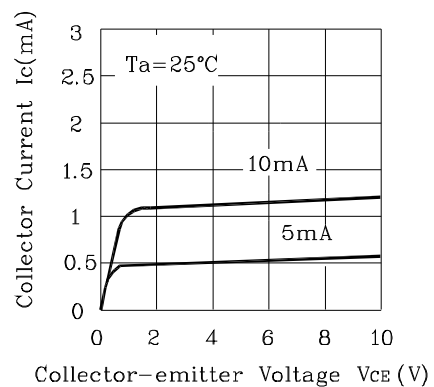


Fig.6 Forward Current vs. Collector-Emitter Voltage



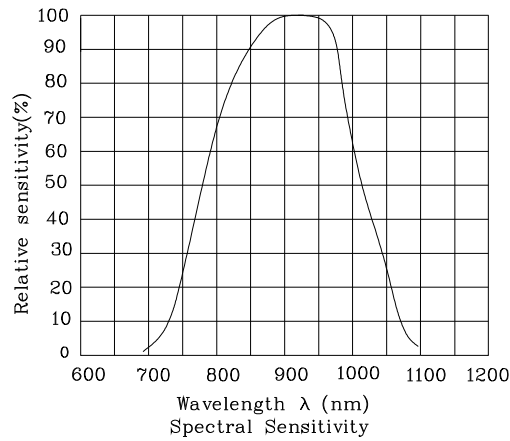


Fig.7 Relative Collector Current vs. Shield Distance(1)

Fig.8 Relative Collector Current vs. Shield Distance(2)

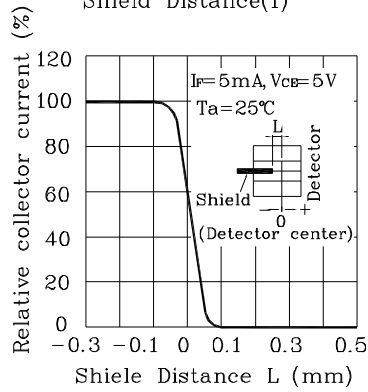
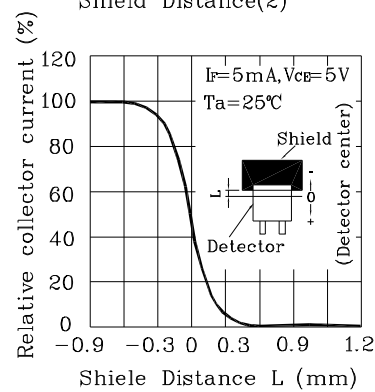
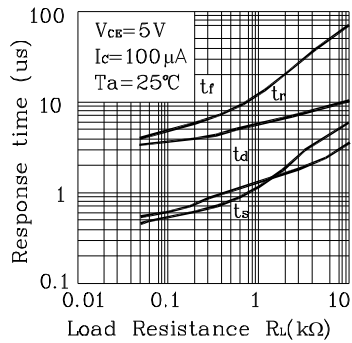


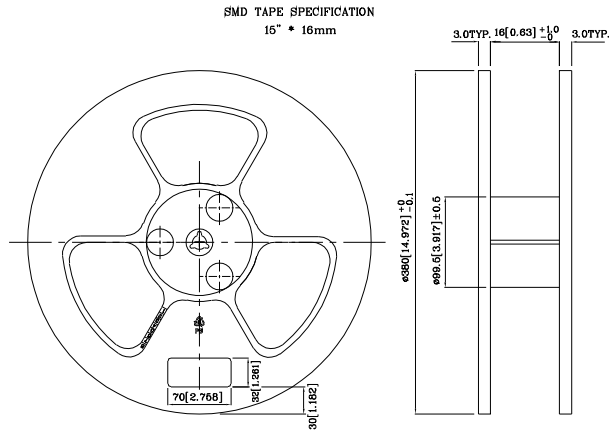
Fig.9 Response Time vs. Load Resistance



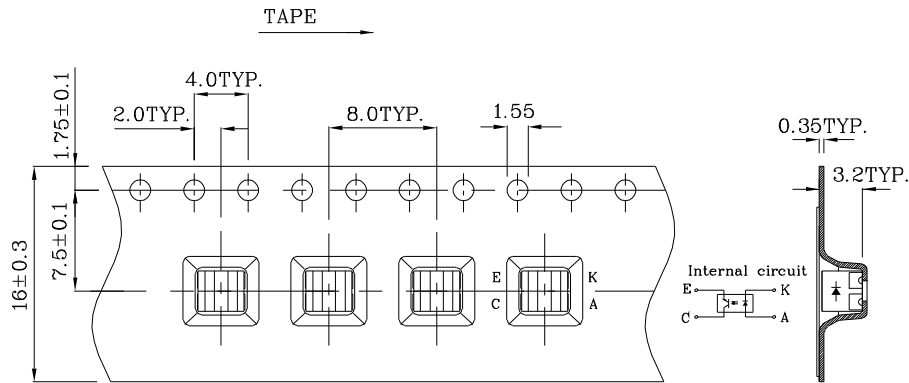
Test Circuit for Response Time



**Reel Dimensions
(Units: mm)**



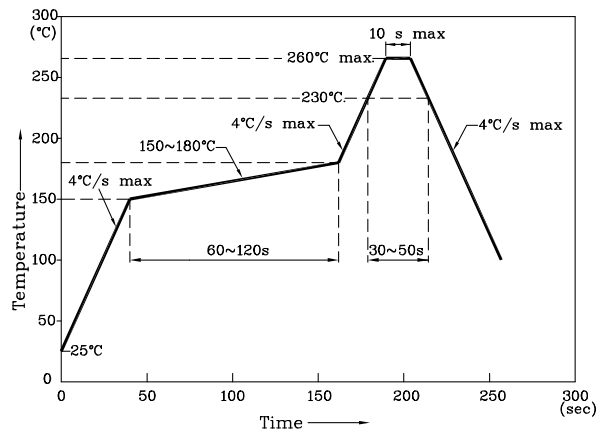
**Tape Specifications
(Units: mm)**



Tape quantity 3000pcs/reel

PI-A27

Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.