

SIT307 Photo Interrupter

The SIT307 is a photointerrupter high-performance standard type, combines high-output GaAs IRED with high sensitive phototransistor.

Features

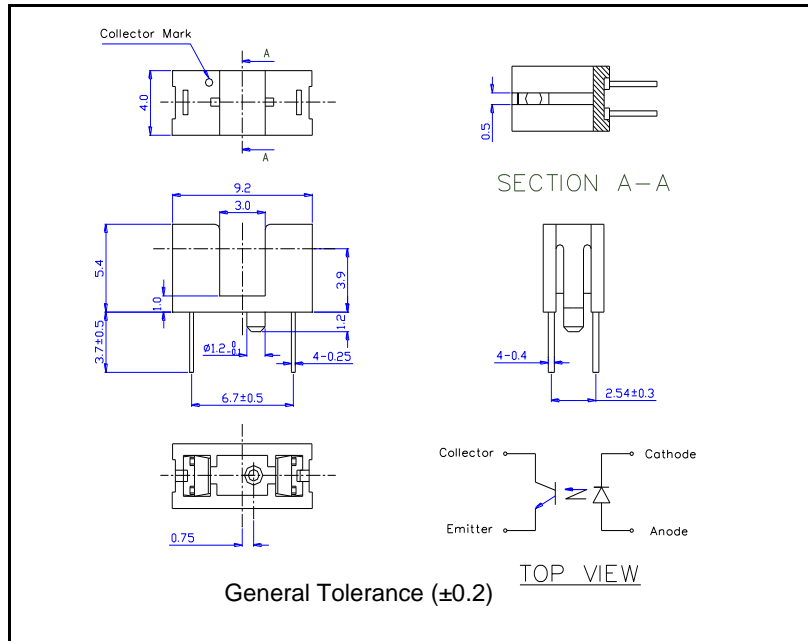
- PWB direct mount type
- GAP:3mm
- With the installation positioning boss
- Compact/High performance

Applications

- Printers
- Faxes
- Car stereo
- Card readers/writers

Dimensions

Unit:mm



Absolute Maximum Ratings

(Ta=25°C)

| Item | Symbol | Ratings | Unit |
|--------------------------|-----------------------------|-----------|-------|
| Input | Power dissipation | P_D | 75 mW |
| | Forward current | I_F | 50 mA |
| | Reverse voltage | V_R | 5 V |
| | Pulse forward current *1 | I_{FP} | 1 A |
| Output | Collector power dissipation | P_C | 75 mW |
| | Collector current | I_C | 20 mA |
| | Collector-Emitter voltage | V_{CEO} | 30 V |
| | Emitter-Collector voltage | V_{ECO} | 5 V |
| Operating temperature *2 | Topr. | -25~+85 | °C |
| Storage temperature *2 | Tstg. | -40~+85 | °C |
| Soldering temperature *3 | Tsol. | 260 | °C |

* 1.Pulse width:tw≤100μs period=10msec

* 2.No icebound or dew

* 3.For MAX.5 seconds at the position of 1mm from the resin edge

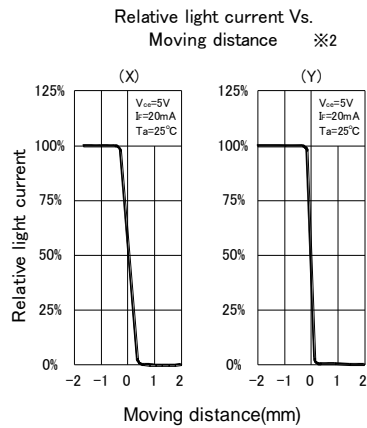
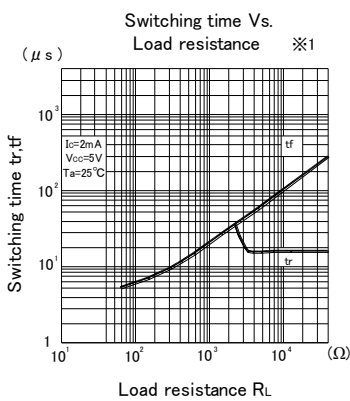
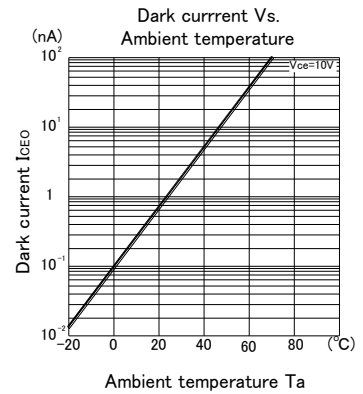
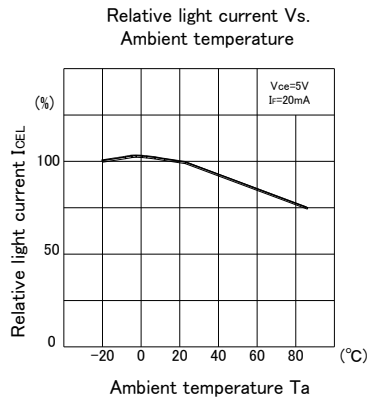
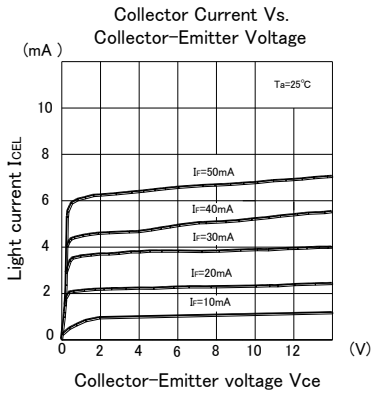
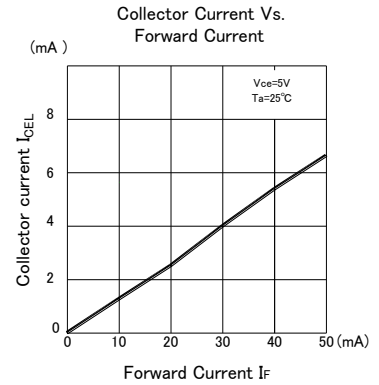
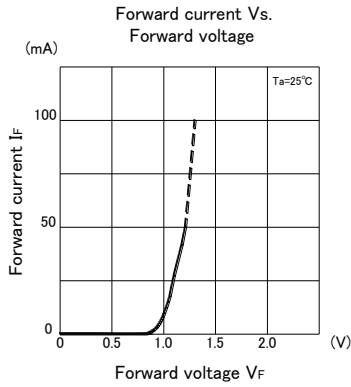
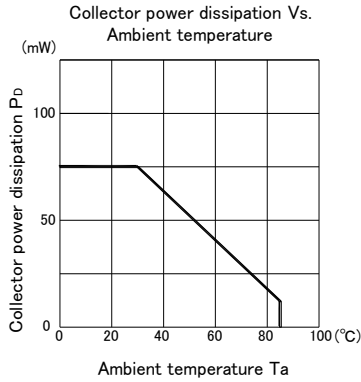
Electro-Optical Characteristics

(Ta=25°C)

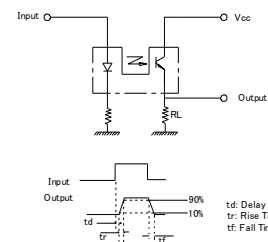
| Item | Symbol | Conditions | Min | Typ | Max | Unit |
|--------------------------|------------------------|-------------------------------------|-----|------|-----|------|
| Input | Forward voltage | $I_F=20mA$ | - | 1.2 | 1.4 | V |
| | Reverse current | $V_R=5V$ | - | - | 10 | μA |
| | Peak wavelength | $I_F=20mA$ | - | 940 | - | nm |
| Output | Collector dark current | $V_{CE}=10V, E_V=0lx$ | - | 1 | 100 | nA |
| Transfer Characteristics | Light current | $V_{CE}=5V, I_F=20mA$ (Non-Shading) | 0.7 | - | 14 | mA |
| | Leakage current | $V_{CE}=5V, I_F=20mA$ (Shading) | - | 0.5 | 10 | μA |
| | C-E saturation voltage | $I_F=20mA, I_C=0.1mA$ | - | 0.15 | 0.4 | V |
| Response Time | Rise time | $V_{CC}=5V, I_C=2mA, R_L=100Ω$ | - | 4 | - | μs |
| | Fall time | | - | 5 | - | μs |

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*1 Switching time measurement circuit



*2 Method of measuring position detection characteristic

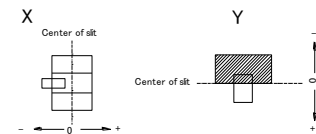


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Packing Specification

- 1.Fixed quantity (max 200pcs) of the products are packed into plastic bag(300*380)
- 2.Ten bags of the products are put into #2 box(max 2000pcs)
3. Two #2 Boxes are put into #3 Box(max 4000pcs)
4. Packing slip is pasted on #3 box.

