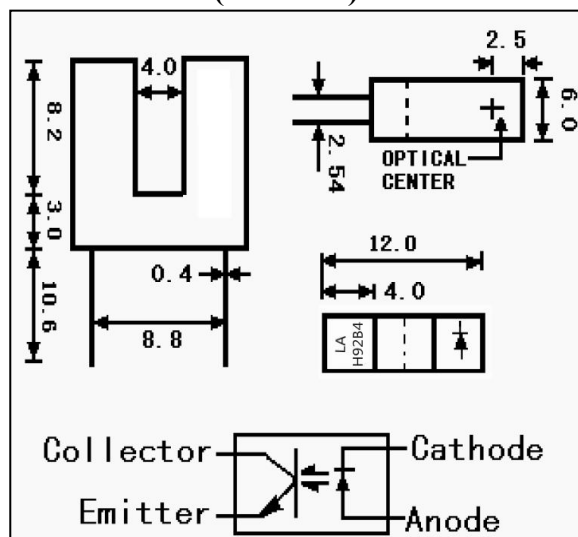




H92B4 is a transmission type photointerrupter combined high power infrared LED with high sensitive phototransistor, suitable for highly precise position sensing.

► DIMENSIONS(Unit:mm)



► MAXIMUM RATINGS

| Item              |                             | Symbol | Rating | Unit |
|-------------------|-----------------------------|--------|--------|------|
| Input             | Power Dissipation           | PD     | 100    | mW   |
|                   | Forward Current             | LF     | 60     | mA   |
|                   | Reverse Voltage             | VR     | 5      | V    |
|                   | Pulse Forward Current*1     | LFP    | 1      | A    |
| Output            | Collector Power Dissipation | Pc     | 100    | mW   |
|                   | Collector Current           | Ic     | 40     | mA   |
|                   | Collector-Emitter Voltage   | VCEO   | 30     | V    |
|                   | Emitter-Collector Voltage   | VECO   | 5      | V    |
| Operating Temp.*2 |                             | Topr.  | -20+85 | °C   |
| Storage Temp.*2   |                             | Tstg.  | -40+85 | °C   |
| Soldering Temp.*3 |                             | Tsol.  | 260    | °C   |

► FEATURES

- 1.Gap width:4.0mm
- 2.Side slit type, width:1.5 X 0.8mm
- 3.PWB direct mount type
- 4.Detecting & emitting field with visible ray filter

► APPLICATION:

- Amusement Machine
- ATM Machines
- Shaft Encoder
- Printer

\*1.Pulse width:  $t_w \leq 100\mu s$  Period:  $T=10ms$

\*2.No icebound or dew

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

► ELECTRO-OPTICAL CHARACTERISTICS

| Item         |                        | Symbol      | Condition                       | Min | Typ. | Max. | Unit    |
|--------------|------------------------|-------------|---------------------------------|-----|------|------|---------|
| Input        | Forward Voltage        | VF          | IF=20mA                         | -   | 1.2  | 1.4  | V       |
|              | Reverse Current        | IR          | VR=5V                           | -   | -    | 10   | $\mu A$ |
|              | Peak Wavelength        | $\lambda P$ | -                               | -   | 940  | -    | nm      |
| Output       | Collector Dark Current | ICEO        | VCE=10V, EV=0 IX                | -   | 1    | 100  | nA      |
| Transmission | Light Current          | Ic          | VCE=5V, IF=20mA(Non-Shading)    | 1   | -    | -    | mA      |
|              | Leakage Current        | ICEOD       | VCE=5V, IF=20mA(Shading)        | -   | 0.5  | 10   | $\mu A$ |
|              | C-E Saturation Voltage | VCE(sat)    | IF=20mA, IC=0.1mA               | -   | 0.15 | 0.4  | v       |
|              | Rise Time              | tr          | VCC=5V, IC=2mA, RL=100 $\Omega$ | -   | 4    | -    | $\mu s$ |
|              | Fall Time              | tf          |                                 | -   | 5    | -    | $\mu s$ |