

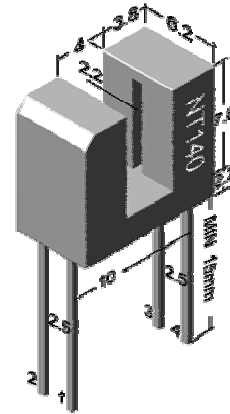
NT140

● Features

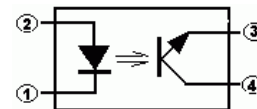
- Combines high output GaAs IRED with high sensitive phototransistor.
- Non-contact detecting manner.
- Slit width(resolution): 0.8mm.

● Dimensions Unit:mm

Unless otherwise specified, the tolerances are $\pm 0.2\text{mm}$



Internal Circuit



● Absolute Maximum Ratings(Ta=25°C)

| Parameter | | Symbol | Rating | Unit |
|--------------------------|-----------------------------|------------------|--------|------|
| Input | Forward Current | I _F | 50 | mV |
| | Reverse Voltage | V _R | 6 | V |
| | Power Dissipation | P | 75 | mW |
| Output | Collector-Emitter Voltage | V _{CEO} | 25 | V |
| | Emitter-Collector Voltage | V _{ECO} | 6 | V |
| | Collector Power Dissipation | P _C | 50 | mW |
| *Operating Temperature | | T _{opr} | -20~65 | °C |
| Storage Temperature | | T _{stg} | -30~75 | °C |
| ** Soldering Temperature | | T _{sol} | 260 | °C |

*The special requirement could be met according to customer's request.

**Soldering time: 5s max. Soldering position: at least 1.5mm from the base of the package.

● Electro-Optical Characteristics (Ta=25°C)

| Parameter | | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|--------------------------|--------------------------------------|----------------------|--|----------------|------|------|------|
| Input | Forward Voltage | V _F | I _F =20mA | - | 1.25 | 1.5 | V |
| | Reverse Current | I _R | V _R =3V | - | - | 10 | μA |
| Output | Collector Dark Current | I _{CEO} | V _{CE} =20V | - | - | 1 | μA |
| | Collector Light Current | I _L | V _{CE} =5V I _F =8mA | 0.4 | - | - | mA |
| | Collector-Emitter Saturation Voltage | V _{CE(SAT)} | I _F =8mA I _C =0.15mA | - | - | 0.4 | V |
| Transfer Characteristics | Response Time | Rise Time | I _F =20mA V _{CE} =5V R _C =100Ω | - | 5 | - | μS |
| | | Fall Time | | T _f | - | 5 | - |