

Subminiature Photointerrupter Model No: LBT-125

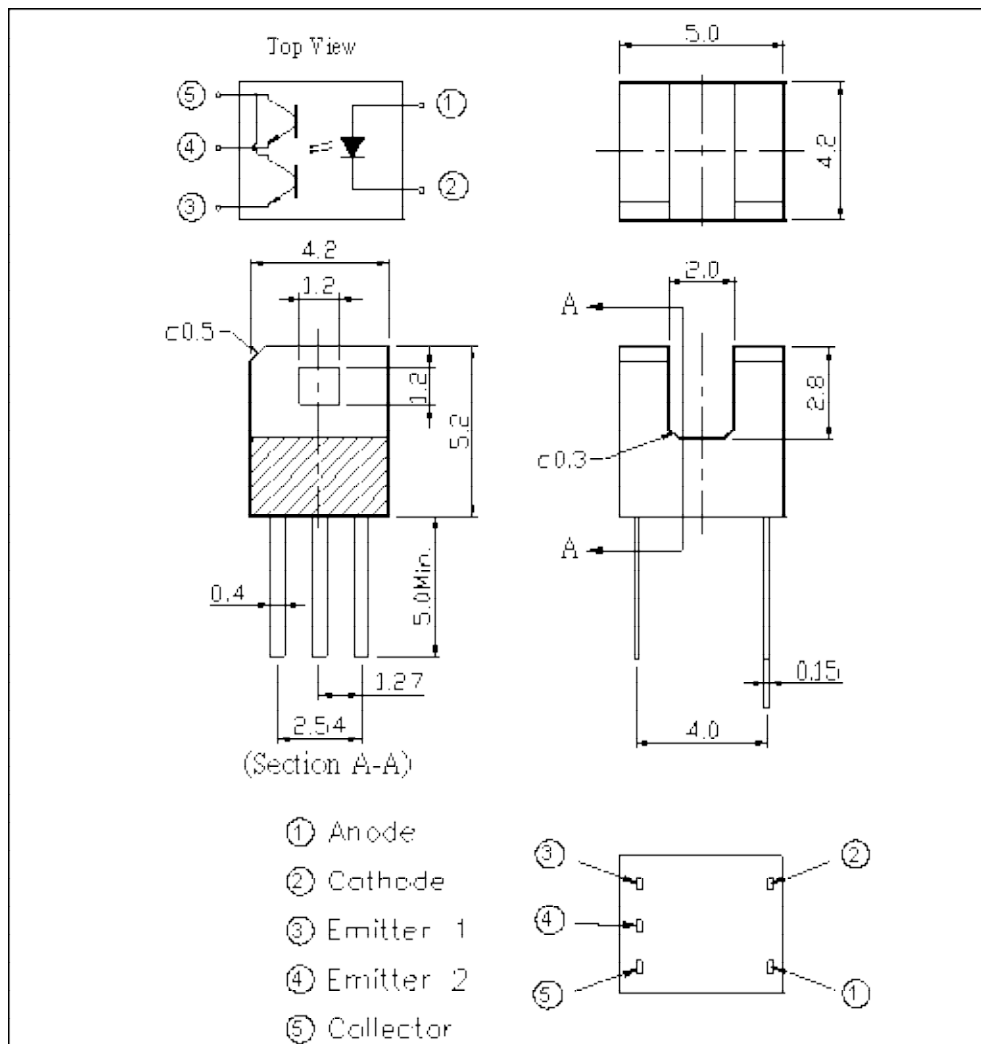
Features

- Compact package based on the double-mold method.
- High resolution (slit width = 1.2mm).
- Gap between emitter and detector is 2.0mm.

Applications

- Floppy disk drives
- Printers
- Cameras

Outline Dimensions (Unit: mm)



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Absolute Maximum Ratings (Ambient Temperature: 25°C)

| Item | | Symbol | Rating | Units | Note |
|-----------------------|-----------------------------|------------------|------------|-------|----------------------------------|
| Input | Forward current | I _F | 50 | mA | |
| | Reverse voltage | V _R | 5 | V | |
| | Peak forward current | I _{FP} | 1 | A | T _w =10 μs, t=10ms |
| | Power dissipation | P _d | 75 | mW | |
| Output | Collector current | I _c | 50 | mA | |
| | Collector-Emitter voltage | V _{ceo} | 30 | V | |
| | Emitter-Collector voltage | V _{eco} | 5 | V | |
| | Collector power dissipation | P _c | 100 | mW | |
| Storage Temperature | | T _{stg} | -40 to +85 | °C | |
| Operating Temperature | | T _{op} | -25 to +85 | °C | |
| Soldering Temperature | | T _{sol} | 260 | °C | 5 seconds max. |

Electrical Specifications (Ambient Temperature: 25°C)

| Item | | Symbol | MIN. | TYP. | MAX. | Units | Conditions |
|-----------------|------------------------|----------------------|------|------|------|-------|---|
| Input | Forward voltage | V _F | | 1.2 | 1.4 | V | I _F =20mA |
| | Reverse current | I _R | | | 10 | μA | V _R =5V |
| | Peak wavelength | λ _p | | 940 | | nm | |
| | View angle | 2θ 1/2 | | 35 | | Deg. | I _F =20mA |
| Output | Dark current | I _{ceo} | | | 100 | nA | V _{ce} =20V |
| | C-E saturation voltage | V _{ce(sat)} | | | 0.4 | V | I _c =2mA, I _B =0.1mA |
| Light current | | I _{c(on)} | 0.5 | | | mA | V _{ce} =5V I _F =20mA |
| Leakage current | | I _{leak} | | | 1 | μA | |
| Speed | Rise Time | t _r | | 5 | | μs | V _{ce} =5V I _c =1mA R _L =1KΩ |
| | Fall Time | t _f | | 5 | | | |

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Reference Data

