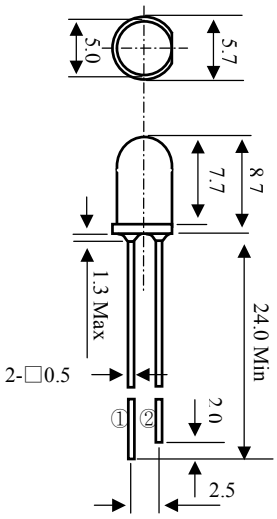
# Phototransistor

# OPT6794

The OPT6794 is a high-sensitivity NPN silicon phototransistor mounted in a clear plastic package. With lensed package this small phototransistor is designed to optimize the mechanical resolution coupling efficiency, cost and reliability.

DIMENSIONS (Unit:mm)




① Emitter
② Collector

**FEATURES**
- Lensed for high sensitivity
- High reliability and stable characteristics
- Low-cost

**APPLICATIONS**
- Optical counters
- Optical detectors
- Camera stroboscopes

***** Please take proper steps in order to secure reliability and safety in required conditions and environments for this device.

**MAXIMUM RATINGS** (Ta=25℃)

| Item | Symbol | Rating | Unit |
|---|---|---|---|
| C-E Voltage. | $V_{CEO}$ | 35 | V |
| E-C Voltage. | $I_F$ | 6 | V |
| Collector current. | Ic | 20 | mA |
| Collector Power dissipation. | Pc | 50 | mW |
| Operating temp. | Topr. | -25~+85 | ℃ |
| Storage temp. | Tstg. | -30~+100 | ℃ |
| Soldering temp. *1 | Tsol. | 260℃ within 5 seconds | |

*1.Lead Soldering Temperature (2㎜ from case for 5sec.).

**ELECTRO-OPTICAL CHARACTERISTICS** (Ta=25℃)

| Item | | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| Collector dark current. | | $I_{CEO}$ | $V_{CEO}$=10V, Ev=0 | - | 1 | 100 | nA |
| Light current. *2 | | $I_{CEL}$ | $V_{CE}$=3V,Ev=1000$_{LUX}$ | 0.5 | 4.0 | - | mA |
| C-E Saturation Voltage | | $V_{CE(SAT)}$ | Ic=0.2㎃,2000$_{LUX}$ | - | 0.2 | 0.4 | V |
| Switching speeds | Rise time | tr | | - | 2.5 | - | μsec. |
| | Fall time | tf | | - | 3.8 | - | μsec. |
| Spectral Sensitivity | | λ | | 450~1050 | | | nm |
| Peak Sensitivity wavelength | | $\lambda_P$ | | | 880 | | nm |
| Half angle | | Δ Θ | | | ±17 | | deg. |

*2 Tungsten lamp of a color temperature of T=2856° K