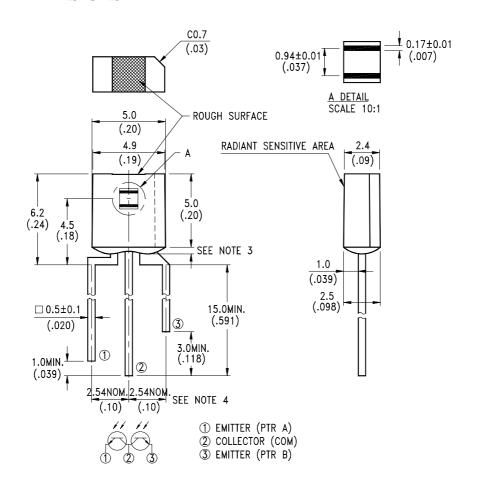
LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

FEATURES

- * WIDE RANGE OF COLLECTOR CURRENT
- * HIGH SENSITIVITY
- * FAST SWITCHING TINE
- * THE LTR-5677D IS A SPECIAL DARK GREEN PLASTIC PACKAGE THAT CUT THE VISIBLE FOR THE DETECTORS OF INFRARED APPLICATIONS

PACKAGE DIMENSIONS



NOTES:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is \pm 0.25mm(.010") unless otherwise noted.
- 3. Protruded resin under flange is 1.5mm(.059") max.
- 4. Lead spacing is measured where the leads emerge from the package.
- 5. Specifications are subject to change without notice.

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ABSOLUTE MAXIMUM RATINGS AT TA=25°C

| PARAMETER | MAXIMUM RATING | UNIT | | | |
|---|---------------------|------|--|--|--|
| Power Dissipation | 100 | mW | | | |
| Collector-Emitter Voltage | 30 | V | | | |
| Emitter-Collector Voltage | 5 | V | | | |
| Operating Temperature Range | -40°C to + 85°C | | | | |
| Storage Temperature Range | -55°C to + 100°C | | | | |
| Lead Soldering Temperature [1.6mm(.063") From Body] | 260°C for 5 Seconds | | | | |

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ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION | BIN NO. | Marking Color |
|--|----------------------|------|------|------|---------|---|------------|------------------|
| Collector-Emitter Breakdown Voltage | V _{(BR)CEO} | 30 | | | V | $I_{C} = 1 \text{mA}$ $Ee = 0 \text{mW/cm}^{2}$ | | |
| Emitter-Collector Breakdown Voltage | V _{(BR)ECO} | 5 | | | V | $I_E = 100 \mu A$ $Ee = 0 \text{mW/cm}^2$ | | |
| Collector Emitter Saturation Voltage | V _{CE(SAT)} | | 0.1 | 0.4 | V | $I_{C} = 50 \mu A$ $Ee = 0.5 \text{mW/cm}^{2}$ | | |
| Rise Time | Tr | | 15 | | μ s | $V_{CC} = 5V$ | | |
| Fall Time | Tf | | 18 | | μ s | $I_{\rm C} = 1 \text{mA}$ $R_{\rm L} = 1 \text{K} \Omega$ | | |
| Collector Dark Current | I_{CEO} | | 0.1 | 100 | nA | $V_{CE} = 10V$ $Ee = 0mW/cm^{2}$ | | |
| Average On State Collector Current Range Setting of LITE-ON Production (I _{L1} /I _{L2})/2 | $I_{C(ON)}$ | 0.20 | | 0.25 | | $V_{CE} = 5V$ $Ee = 1 \text{mW/cm}^2$ | BIN A | Red |
| | | 0.25 | | 0.30 | mA | | BIN B | Black |
| | | 0.30 | | 0.35 | | | BIN C | Green |
| | | 0.35 | | 0.40 | | | BIN D | Blue |
| | | 0.40 | | 0.45 | | | BIN E | White |
| | | 0.45 | | 0.50 | | | BIN F | Purple |
| | | 0.50 | | 0.55 | | | BIN G | Yellow |
| | | 0.55 | | 0.60 | | | BIN H | Orange |
| | | 0.60 | | 0.65 | | | BIN I | Golden |
| Average On State Collector Current Range Q.C Limits $\left(I_{L1}/I_{L2}\right)/\ 2$ | I _{C(ON)} | 0.16 | | 0.30 | mA | $V_{CE} = 5V$ $Ee = 1 \text{mW/cm}^2$ | BIN A | Red |
| | | 0.20 | | 0.36 | | | BIN B | Black |
| | | 0.24 | | 0.42 | | | BIN C | Green |
| | | 0.28 | | 0.48 | | | BIN D | Blue |
| | | 0.32 | | 0.54 | | | BIN E | White |
| | | 0.36 | | 0.60 | | | BIN F | Purple |
| | | 0.40 | | 0.66 | | | BIN G | Yellow |
| | | 0.44 | | 0.72 | | | BIN H | Orange |
| | | 0.48 | | 0.78 | | | BIN I | Golden |
| Collector Current Ratio Of 2 Phototransistor | R | 0.8 | 1.0 | 1.25 | | $I_{C(ON)(a)} / I_{C(ON)(b)}$ | | |

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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

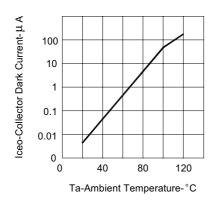
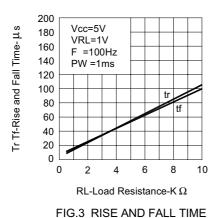


FIG.1 COLLECTOR DARK CURRENT **VS AMBIENT TEMPERATURE**



VS LOAD RESISTANCE

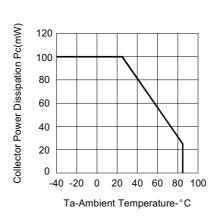


FIG.2 COLLECTOR POWER DISSIPATION VS AMBIENT TEMPERATURE

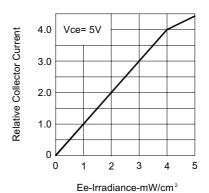


FIG.4 RELATIVE COLLECTOR CURRENT VS IRRADIANCE

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