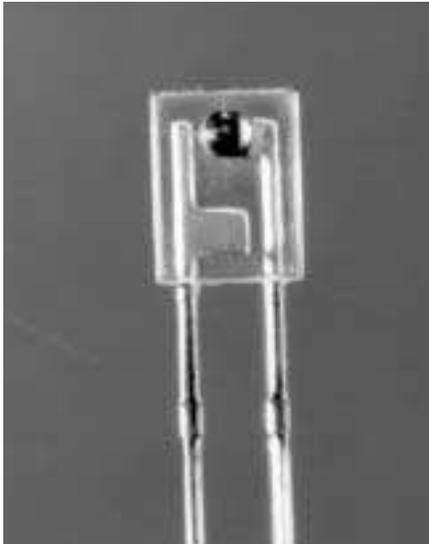


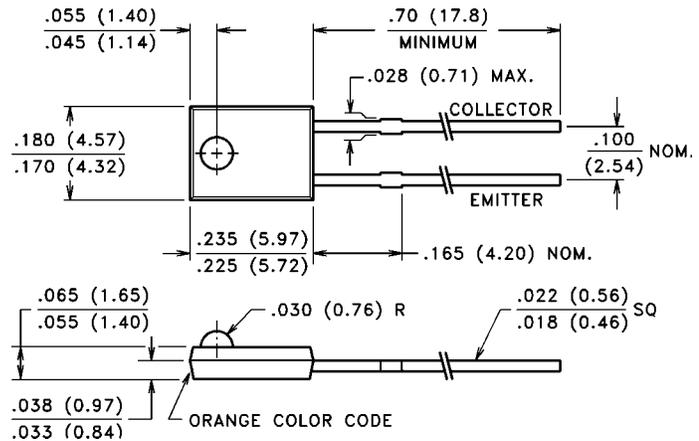
.025" NPN Phototransistors

Molded Lensed Lateral Package

VTT7122, 7123, 7125



PACKAGE DIMENSIONS inch (mm)



CASE 7 LATERAL
CHIP TYPE: 25T

PRODUCT DESCRIPTION

A small area high speed NPN silicon phototransistor mounted in a lensed, side looking, transparent plastic, transfer molded package. These devices are spectrally and mechanically matched to the VTE717x series of IREDS.

ABSOLUTE MAXIMUM RATINGS ■

(@ 25° C unless otherwise noted)

| | |
|-------------------------------|---------------------------------|
| Maximum Temperatures | |
| Storage Temperature: | -40° C to 85° C |
| Operating Temperature: | -40° C to 85° C |
| Continuous Power Dissipation: | 50 mW |
| Derate above 30° C: | 0.91 mW/° C |
| Maximum Current: | 25 mA |
| Lead Soldering Temperature: | 260° C |
| | (1.6 mm from case, 5 sec. max.) |

ELECTRO-OPTICAL CHARACTERISTICS @ 25° C (See also typical curves, pages 91-92)

| Part Number ■ | Light Current | | Dark Current | Collector Breakdown | Emitter Breakdown | Saturation Voltage | Rise/Fall Time | Angular Response $\theta_{1/2}$ | | |
|------------------|---------------|---|--------------|----------------------------|----------------------------|------------------------------|--------------------------------------|---------------------------------|-----------------|----------------|
| | I_C | | I_{CEO} | $V_{BR(CEO)}$ | $V_{BR(ECO)}$ | $V_{CE(SAT)}$ | t_R/t_F | | | |
| | mA | H fc (mW/cm ²) $V_{CE} = 5.0$ V | H = 0 | $I_C = 100 \mu A$ H = 0 | $I_E = 100 \mu A$ H = 0 | $I_C = 1.0$ mA H = 400 fc | $I_C = 1.0$ mA $R_L = 100 \Omega$ | | | |
| | Min. | Max. | (nA) Max. | V_{CE} (Volts) | Volts, Min. | Volts, Min. | Volts, Max. | | μ sec, Typ. | Typ. |
| VTT7122 | 1.0 | — | 100 (5) | 100 | 10 | 30 | 5.0 | 0.25 | 2.0 | $\pm 36^\circ$ |
| VTT7123 | 2.0 | — | 100 (5) | 100 | 10 | 30 | 5.0 | 0.25 | 2.0 | $\pm 36^\circ$ |
| VTT7125 | 4.5 | — | 100 (5) | 100 | 10 | 30 | 5.0 | 0.25 | 2.0 | $\pm 36^\circ$ |

■ Refer to General Product Notes, page 2.