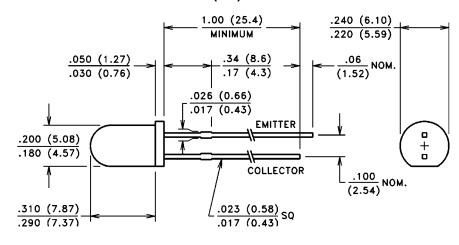
# .025" NPN Phototransistors

Clear T-13/4 (5 mm) Plastic Package

VTT1225, 26, 27



### PACKAGE DIMENSIONS inch (mm)



CASE 26 T-1¾ (5 mm) CHIP TYPE: 25T

#### PRODUCT DESCRIPTION

A small area high speed NPN silicon phototransistor mounted in a 5 mm diameter lensed, end looking, transparent plastic package. Detectors in this series have a half power acceptance angle ( $\theta_{1/2}$ ) of 5°. These devices are spectrally and mechanically matched to the VTE12xx series of IREDs.

#### ABSOLUTE MAXIMUM RATINGS ■

(@ 25°C unless otherwise noted)

**Maximum Temperatures** 

Storage Temperature: -40°C to 100°C Operating Temperature: -40°C to 100°C

Continuous Power Dissipation: 50 mW
Derate above 30°C: 0.71 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
	I <sub>C</sub>			I <sub>CEO</sub>		V <sub>BR(CEO)</sub>	V <sub>BR(ECO)</sub>	V <sub>CE(SAT)</sub>	t <sub>R</sub> /t <sub>F</sub>	
	mA		H fc (mW/cm <sup>2</sup> )	H = 0		I <sub>C</sub> = 100 μA H = 0	I <sub>E</sub> = 100 μA H = 0	I <sub>C</sub> = 1.0 mA H = 400 fc	$I_C = 1.0 \text{ mA}$ $R_L = 100 \Omega$	θ <sub>1/2</sub>
	Min.	Max.	$V_{CE} = 5.0 \text{ V}$	(nA) Max.	V <sub>CE</sub> (Volts)	Volts, Min.	Volts, Min.	Volts, Max.	µѕес, Тур.	Тур.
VTT1225	4.0	_	100 (5)	100	10	30	5.0	0.25	1.5	±5°
VTT1226	7.5	_	100 (5)	100	10	30	5.0	0.25	3.0	±5°
VTT1227	12.0	_	100 (5)	100	10	30	5.0	0.25	4.0	±5°

■ Refer to General Product Notes, page 2.