

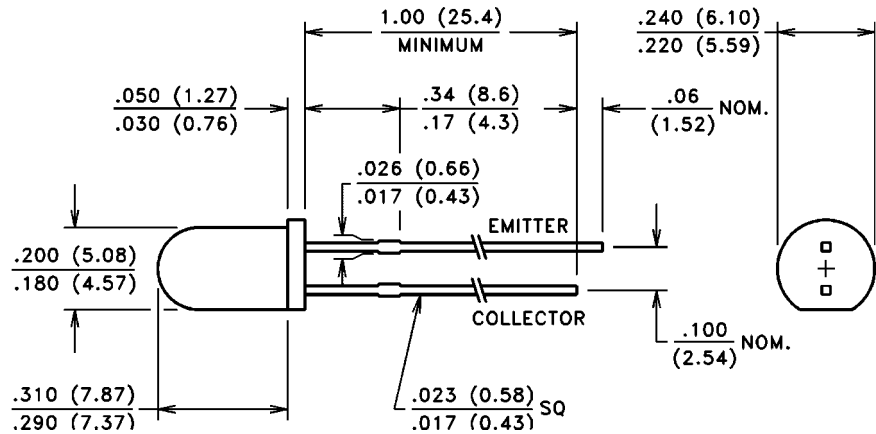
# .025" NPN Phototransistors

Clear T-1 $\frac{3}{4}$  (5 mm) Plastic Package

# VTT1225, 26, 27



## PACKAGE DIMENSIONS inch (mm)



CASE 26 T-1 $\frac{3}{4}$  (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 $\theta_{1/2}$		
	$I_C$		$I_{CEO}$	$V_{BR(CEO)}$	$V_{BR(ECO)}$	$V_{CE(SAT)}$	$t_R/t_F$			
	mA	H fc (mW/cm <sup>2</sup> ) $V_{CE} = 5.0 V$	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.		$\mu sec$ , Typ.	Typ.
VTT1225	4.0	—	100 (5)	100	10	30	5.0	0.25	1.5	$\pm 5^\circ$
VTT1226	7.5	—	100 (5)	100	10	30	5.0	0.25	3.0	$\pm 5^\circ$
VTT1227	12.0	—	100 (5)	100	10	30	5.0	0.25	4.0	$\pm 5^\circ$

■ Refer to General Product Notes, page 2.