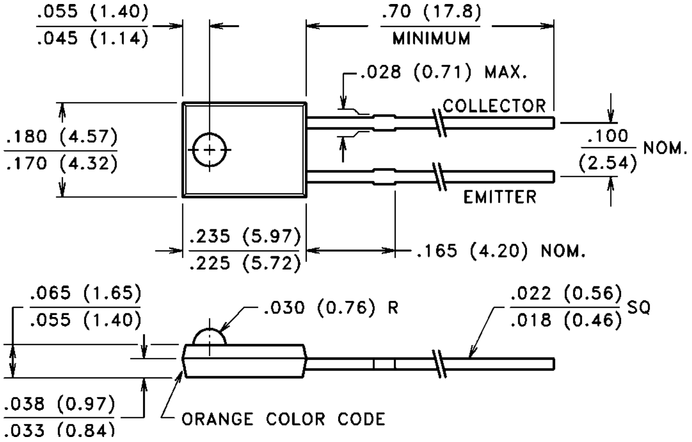
.025" NPN Phototransistors

IRT Molded Lensed Lateral Package

VTT7222, 7223, 7225

PACKAGE DIMENSIONS inch (mm)



CASE 7 LATERAL
CHIP TYPE: 25T

PRODUCT DESCRIPTION

A small area high speed NPN silicon phototransistor mounted in a 3 mm diameter, lensed, end looking, plastic package. The package material transmits infrared and blocks visible light. 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:	0.71 mW/°C
Maximum Current:	25 mA
Lead Soldering Temperature: (1.6 mm from case, 5 sec. max.)	260°C

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 µA H = 0	I_E = 100 µA H = 0	I_C = 1.0 mA H = 400 fc	I_C = 1.0 mA R_L = 100 Ω	
	Min.	Max.		(nA) Max.	V_{CE} (Volts)	Volts, Min.	Volts, Min.	Volts, Max.	µsec, Typ.	Typ.
VTT7222	0.9	—	100 (5)	100	10	30	5.0	0.25	2.0	±36°
VTT7223	1.8	—	100 (5)	100	10	30	5.0	0.25	2.0	±36°
VTT7225	4.0	—	100 (5)	100	10	30	5.0	0.25	4.0	±36°

■ Refer to General Product Notes, page 2.