

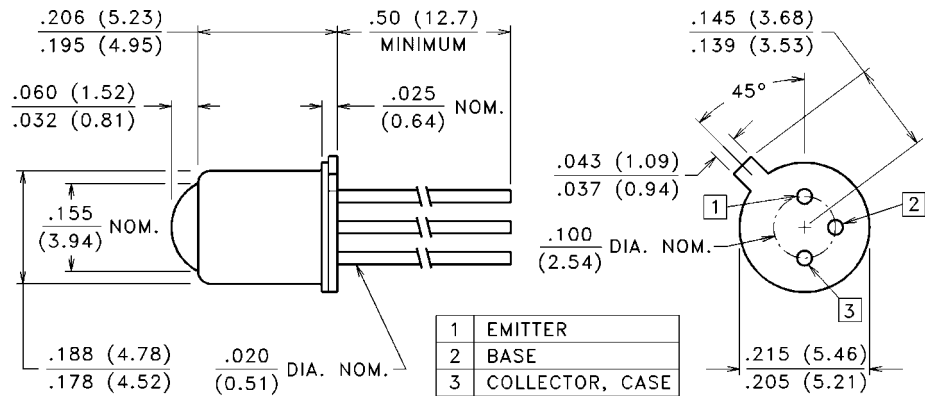
.050" NPN Phototransistors

TO-46 Lensed Package

VTT1115, 16, 17



PACKAGE DIMENSIONS inch (mm)



CASE 3 TO-46 HERMETIC (LENSED)
CHIP TYPE: 50T

PRODUCT DESCRIPTION

A large area high sensitivity NPN silicon phototransistor in a lensed, hermetically sealed, TO-46 package. The hermetic package offers superior protection from hostile environments. The base connection is brought out allowing conventional transistor biasing. These devices are spectrally matched to the VTE11xx series of IREDs.

ABSOLUTE MAXIMUM RATINGS ■

(@ 25°C unless otherwise noted)

Maximum Temperatures	
Storage Temperature:	-40°C to 110°C
Operating Temperature:	-40°C to 110°C
Continuous Power Dissipation:	250 mW
Derate above 30°C:	3.12 mW/°C
Maximum Current:	200 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.	
VTT1115	1.0	—	20 (1)	100	10	30	6.0	0.40	5.0	$\pm 15^\circ$
VTT1116	2.0	—	20 (1)	100	10	30	4.0	0.40	8.0	$\pm 15^\circ$
VTT1117	4.0	—	20 (1)	100	10	30	4.0	0.40	8.0	$\pm 15^\circ$

■ Refer to General Product Notes, page 2.