

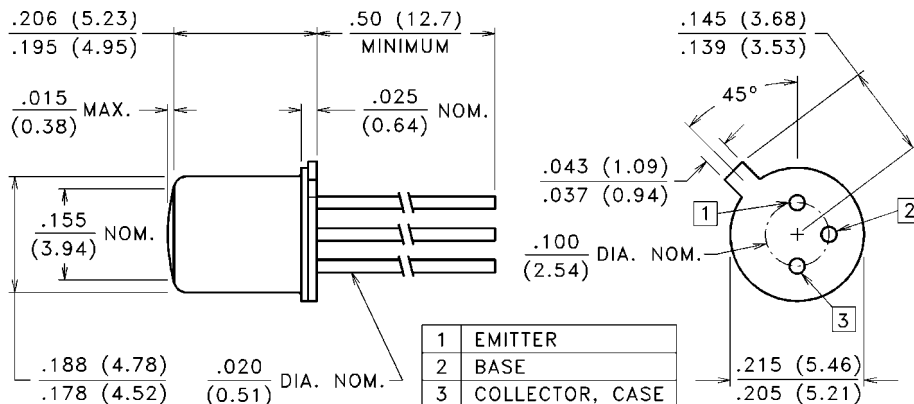
.050" NPN Phototransistors

TO-46 Flat Window Package

VTT1015, 16, 17



PACKAGE DIMENSIONS inch (mm)



CASE 1 TO-46 (FLAT WINDOW)
CHIP TYPE: 50T

PRODUCT DESCRIPTION

A large area high sensitivity NPN silicon phototransistor in a flat 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 VTE10xx 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.	Typ.
VTT1015	0.4	—	100 (5)	25	20	40	6.0	0.40	5.0	$\pm 35^\circ$
VTT1016	1.0	—	100 (5)	25	20	30	6.0	0.40	5.0	$\pm 35^\circ$
VTT1017	2.5	—	100 (5)	25	10	20	4.0	0.40	8.0	$\pm 35^\circ$

■ Refer to General Product Notes, page 2.