

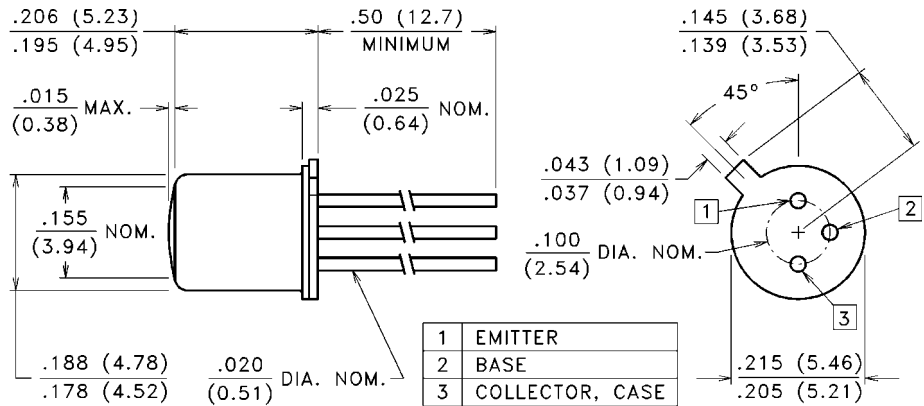
# .050" NPN Phototransistors

TO-46 Flat Window Package

## VTT1015H, 16H, 17H



### 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 VTE10xxH 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.)

RoHS Compliant



### 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	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.
VTT1015H	0.4	—	100 (5)	25	20	40	6.0	0.40	5.0	+35°
VTT1016H	1.0	—	100 (5)	25	20	30	6.0	0.40	5.0	+35°
VTT1017H	2.5	—	100 (5)	25	10	20	4.0	0.40	8.0	+35°

Refer to General Product Notes, page 2.