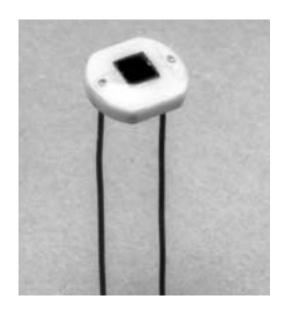
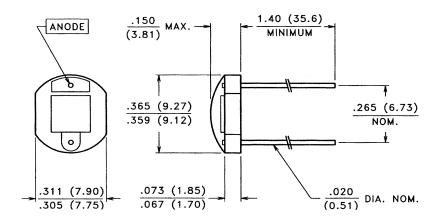
VTB Process Photodiodes

VTB4051H



PACKAGE DIMENSIONS inch (mm)



CASE 13 CERAMIC CHIP ACTIVE AREA: .023 in² (14.8 mm²)

PRODUCT DESCRIPTION

Planar silicon photodiode mounted on a two lead ceramic substrate and coated with a layer of clear epoxy. These diodes have very high shunt resistance and have good blue response.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -20°C to 75°C Operating Temperature: -20°C to 75°C

RoHS Compliant



ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTB curves, pages 21-22)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTB4051H			UNITS
			Min.	Тур.	Max.	UNITS
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	100	200		μΑ
TC I _{SC}	I _{SC} Temperature Coefficient	2850 K		.12	.23	%/°C
V _{OC}	Open Circuit Voltage	H = 100 fc, 2850 K		490		mV
TC V _{OC}	V _{OC} Temperature Coefficient	2850 K		-2.0		mV/°C
I _D	Dark Current	H = 0, VR = 2.0 V			250	pA
R _{SH}	Shunt Resistance	H = 0, V = 10 mV		.56		$G\Omega$
TC R _{SH}	R _{SH} Temperature Coefficient	H = 0, V = 10 mV		-8.0		%/°C
C_{J}	Junction Capacitance	H = 0, V = 0		3.0		nF
S_R	Sensitivity	365 nm		.10		A/W
λ_{range}	Spectral Application Range		320		1100	nm
λ_{p}	Spectral Response - Peak			920		nm
V_{BR}	Breakdown Voltage		2	40		V
θ _{1/2}	Angular Resp 50% Resp. Pt.			±60		Degrees
NEP	Noise Equivalent Power		2.1 x 10 ⁻¹⁴ (Typ.)			W∕√Hz
D*	Specific Detectivity		1.8 x 10 ¹³ (Typ.)			cm√Hz/W