VTB Process Photodiodes

VTB100H

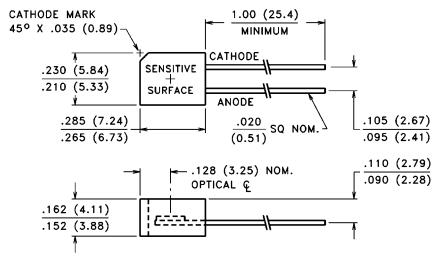


PRODUCT DESCRIPTION

Planar silicon photodiode in a clear molded plastic sidelooker package suitable for assembly onto printed circuit boards. These diodes have very high shunt resistance and have good blue response.

RoHS Compliant

PACKAGE DIMENSIONS inch (mm)



CASE 52 FLAT SIDELOOKER CHIP ACTIVE AREA: .012 in² (7.45 mm²)

ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -40°C to 100°C
Operating Temperature: -40°C to 100°C

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTB100H			UNITS
			Min.	Тур.	Max.	- UNITS
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	50	65		μA
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	$H = 0$, $V_R = 10 V$		50	500	pА
R _{SH}	Shunt Resistance	H = 0, V = 10 mV		1.4		GΩ
TC R _{SH}	R _{SH} Temperature Coefficient	H = 0, $V = 10 mV$		-8.0		%/°C
СЈ	Junction Capacitance	H = 0, V = 0			2.0	nF
S_R	Sensitivity	365 nm		.1		A/W
λ_{range}	Spectral Application Range		320		1100	nm
$\lambda_{ m p}$	Spectral Response - Peak			920		nm
V_{BR}	Breakdown Voltage		30	40		V
$\theta_{1/2}$	Angular Resp 50% Resp. Pt.			±70		Degrees
NEP	Noise Equivalent Power		2.6 x 10 ⁻¹⁴ (Typ.)			W∕√Hz
D*	Specific Detectivity			1.05 x 10 ¹³ (Typ.)		cm√Hz/W