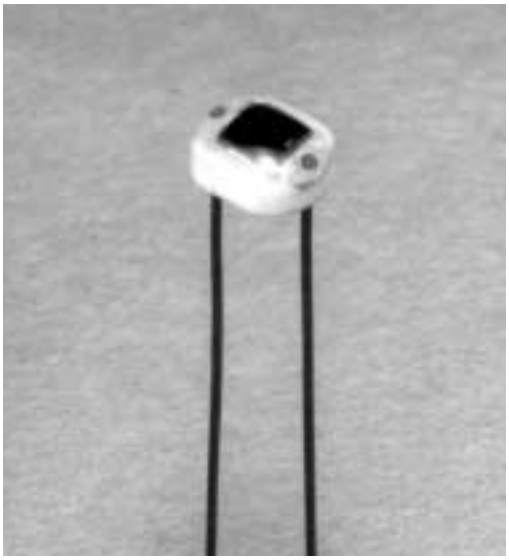
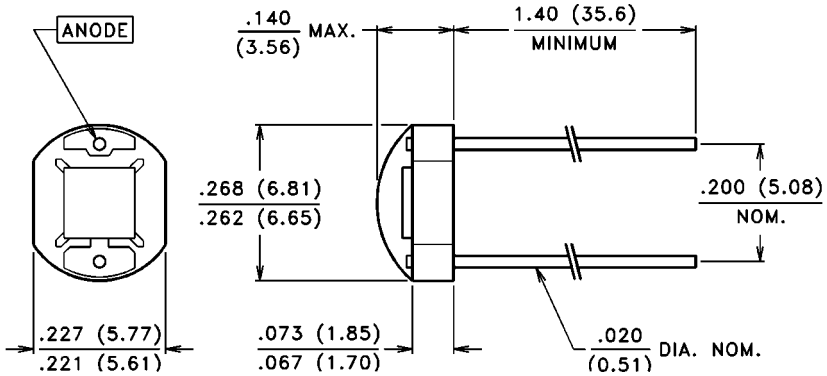
VTB Process Photodiodes

VTB8341



PACKAGE DIMENSIONS inch (mm)



CASE 11 CERAMIC
CHIP ACTIVE AREA: .008 in^2 (5.16 mm^2)

PRODUCT DESCRIPTION

Planar silicon photodiode mounted on a two lead ceramic substrate and coated with a thick 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

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTB8341			UNITS
			Min.	Typ.	Max.	
I_{SC}	Short Circuit Current	H = 100 fc, 2850 K	35	60		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, VR = 2.0 V			100	pA
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
C_J	Junction Capacitance	H = 0, V = 0		1.0		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
$\theta_{1/2}$	Angular Resp. - 50% Resp. Pt.			±60		Degrees
NEP	Noise Equivalent Power			2.4×10^{-14} (Typ.)		$W/\sqrt{Hz}$
D*	Specific Detectivity			9.7×10^{12} (Typ.)		$cm\sqrt{Hz}$ / W

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