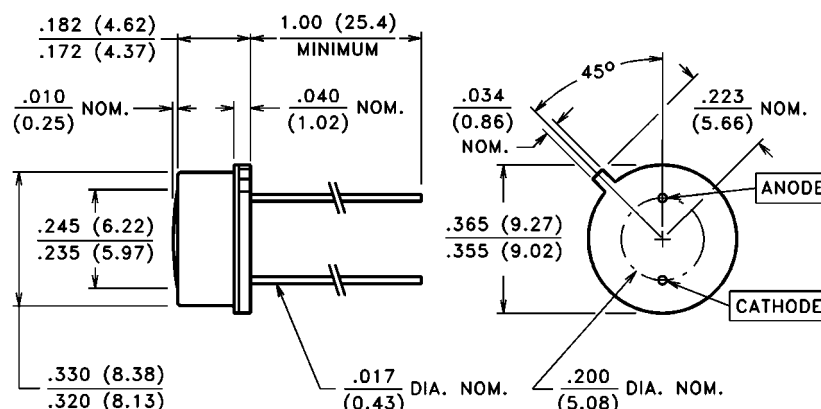




PACKAGE DIMENSIONS inch (mm)



CASE 14 TO-5 HERMETIC
CHIP ACTIVE AREA: .023 in² (14.8 mm²)

PRODUCT DESCRIPTION

Planar silicon photodiode in a dual lead TO-5 package with a UV transmitting "flat" window. Chip is common to the case. These diodes have very high shunt resistance and have good blue response.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature:

-40°C to 110°C

Operating Temperature:

-40°C to 110°C

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTB5051UV			UNITS
			Min.	Typ.	Max.	
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	85	130		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			250	pA
R _{SH}	Shunt Resistance	H = 0, V = 10 mV		.56		GΩ
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		0.1		A/W
S _R	Sensitivity	220 nm	.038			A/W
λ _{range}	Spectral Application Range		200		1100	nm
λ _p	Spectral Response - Peak			920		nm
V _{BR}	Breakdown Voltage		2	40		V
θ _{1/2}	Angular Resp. - 50% Resp. Pt.			±50		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