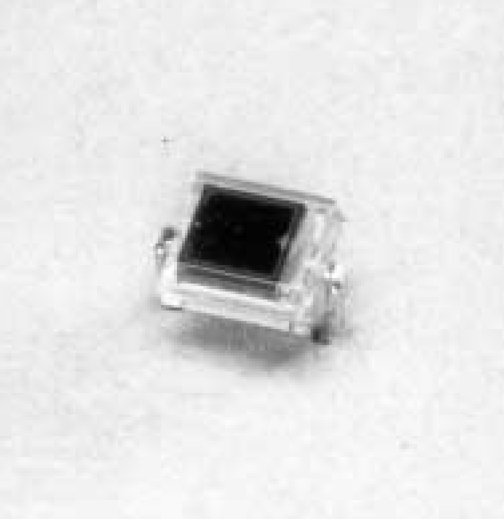
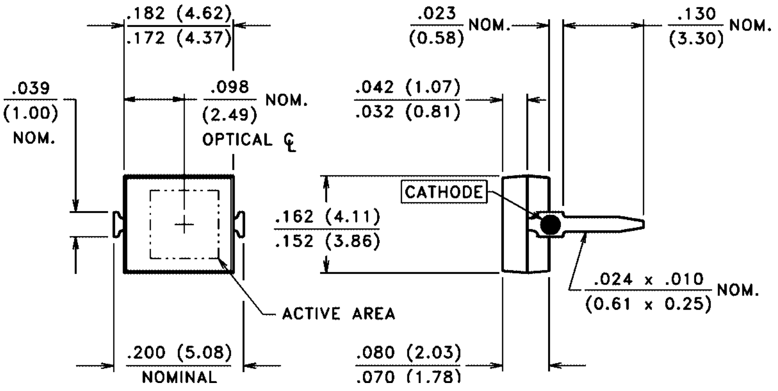
Alternate Source/ Second Source Photodiodes

VTD34

(BPW34 INDUSTRY EQUIVALENT)



PACKAGE DIMENSIONS inch (mm)



CASE 22 MINI DIP
CHIP ACTIVE AREA: .012 in^2 (7.45 mm^2)

PRODUCT DESCRIPTION

Planar silicon photodiode in a transparent molded plastic package. Suitable for direct mounting to P.C.B. Arrays can be formed by positioning these devices side by side. These photodiodes are designed to provide excellent sensitivity at low levels of irradiance.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature:	-20°C to 80°C
Operating Temperature:	-20°C to 80°C

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTD34			UNITS
			Min.	Typ.	Max.	
I_{SC}	Short Circuit Current	1000 Lux, 2850 K	50	70		µA
TC I_{SC}	I_{SC} Temperature Coefficient	2850 K		.20		%/°C
V_{OC}	Open Circuit Voltage	H = 1000 Lux, 2850 K	300	365		mV
TC V_{OC}	V_{OC} Temperature Coefficient	2850 K		-2.0		mV/°C
I_D	Dark Current	H = 0, V_R = 10 V		2	30	nA
C_J	Junction Capacitance	@ 1 MHz, V_R = 0 V		60		pF
t_R/t_F	Rise/Fall Time @ 1 kΩ Lead	VR = 10 V, 833 nm		50		nsec
S_R	Sensitivity	@ Peak		0.60		A/W
λ_{range}	Spectral Application Range		400		1100	nm
λ_p	Spectral Response - Peak			900		nm
V_{BR}	Breakdown Voltage		40			V
$\theta_{1/2}$	Angular Resp.-50% Resp. Pt.			±50		Degrees
NEP	Noise Equivalent Power		4.8×10^{-14}			$W/\sqrt{Hz}$
D*	Specific Detectivity		5.7×10^{12}			$cm\sqrt{Hz}/W$