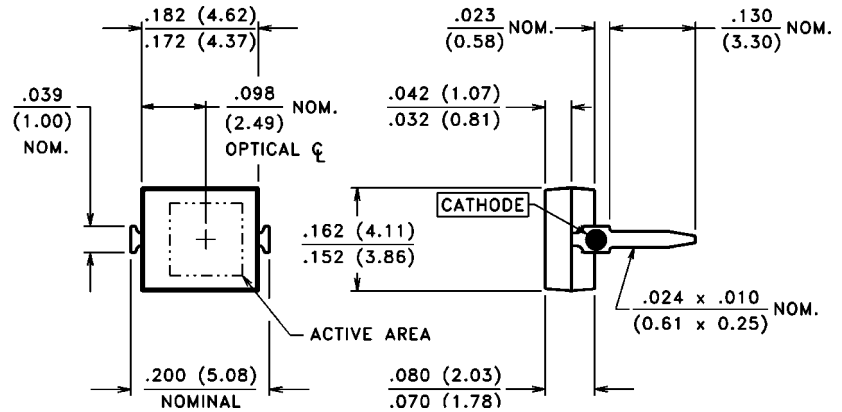


PACKAGE DIMENSIONS inch (mm)



CASE 22 MINI DIP
CHIP ACTIVE AREA: .012 in² (7.45 mm²)

PRODUCT DESCRIPTION

Planar silicon photodiode in a molded plastic package. The package material filters out visible light but passes infrared. Suitable for direct mounting to P.C.B. Arrays can be formed by positioning these devices side by side. The 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	VTD34F			UNITS
			Min.	Typ.	Max.	
Re	Responsivity	0.5 mW/cm ² , 940 nm	15			μA
V _{OC}	Open Circuit Voltage	0.5 mW/cm ² , 940 nm	275	350		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	V _R = 10 V, 833 nm		50		nsec
S _R	Sensitivity	@ Peak		0.60		A/W
λ _{range}	Spectral Application Range		725		1150	nm
λ _p	Spectral Response - Peak			940		nm
V _{BR}	Breakdown Voltage		40			V
θ _{1/2}	Angular Resp.-50% Resp. Pt.			±50		Degrees
NEP	Noise Equivalent Power		4.8 x 10 ⁻¹⁴			W/√Hz
D*	Specific Detectivity		5.7 x 10 ¹²			cm√Hz / W