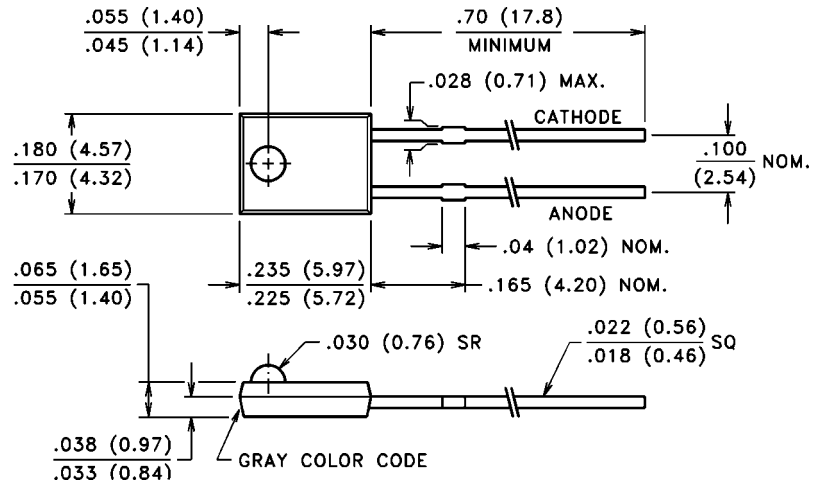


PACKAGE DIMENSIONS inch (mm)



CASE 7 LATERAL
CHIP ACTIVE AREA: .0011 in² (0.684 mm²)

PRODUCT DESCRIPTION

Small area planar silicon photodiode in a lensed sidelooking package. The package material filters out visible light but passes infrared. These diodes exhibit low dark current under reverse bias and fast speed of response.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -40°C to 85°C
Operating Temperature: -40°C to 85°C

RoHS Compliant



ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTP curves, pages 45-46)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTP7210H			UNITS
			Min.	Typ.	Max.	
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	5	7		μA
TC I _{SC}	I _{SC} Temperature Coefficient	2850 K		.26		%/°C
V _{OC}	Open Circuit Voltage	H = 100 fc, 2850 K		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			35	nA
R _{SH}	Shunt Resistance	H = 0, V = 10 mV		7		GΩ
C _J	Junction Capacitance	H = 0, V = 3 V			25	pF
Re	Responsivity	940 nm		.015		A/(W/cm ²)
S _R	Sensitivity	@ Peak		.55		A/W
λ _{range}	Spectral Application Range		700		1150	nm
λ _p	Spectral Response - Peak			925		nm
V _{BR}	Breakdown Voltage		30	140		V
θ _{1/2}	Angular Resp. - 50% Resp. Pt.			±58		Degrees
NEP	Noise Equivalent Power			1.9 x 10 ⁻¹³ (Typ.)		W/√Hz
D*	Specific Detectivity			5.3 x 10 ¹¹ (Typ.)		cm√Hz/W