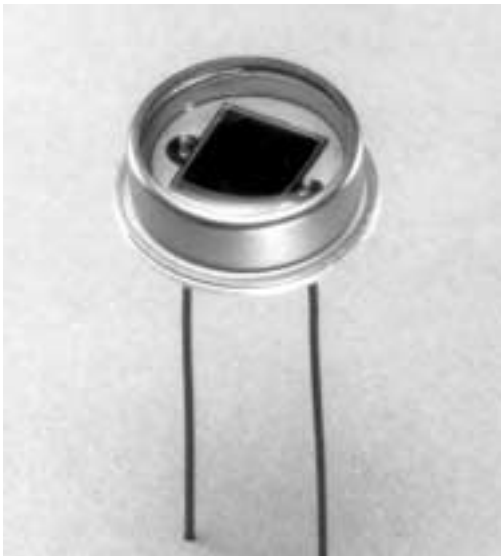
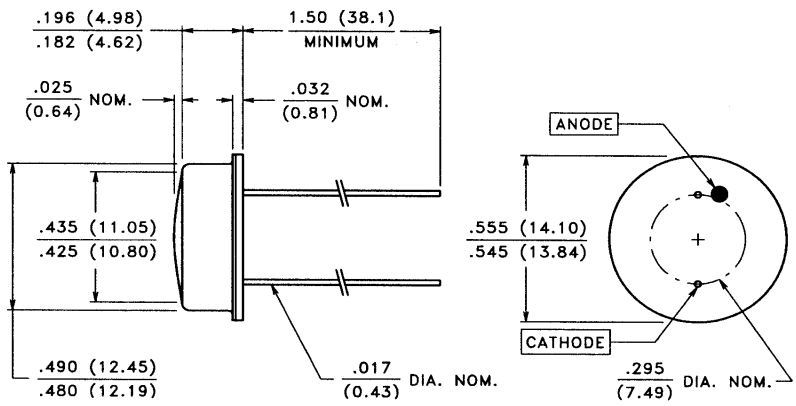
VTP Process Photodiodes

VTP6060



PACKAGE DIMENSIONS inch (mm)



CASE 15 TO-8 HERMETIC
CHIP ACTIVE AREA: .032 in^2 (20.6 mm^2)

PRODUCT DESCRIPTION

Large area planar silicon photodiode in a "flat" window, dual lead TO-8 package. Cathode is common to the case. These diodes exhibit low dark current under reverse bias and fast speed of 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 VTP curves, page 46)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTP6060			UNITS
			Min.	Typ.	Max.	
I_{SC}	Short Circuit Current	H = 100 fc, 2850	120	200		µA
TC I_{SC}	I_{SC} Temperature Coefficient	2850 K		.20		%/°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, VR = 50 V			35	nA
R_{SH}	Shunt Resistance	H = 0, V = 10 mV		100		GΩ
C_J	Junction Capacitance	H = 0, V = 15 V			60	pF
Re	Responsivity	940 nm		.14		A/(W/cm^2)
S_R	Sensitivity	@ Peak		.55		A/W
λ_{range}	Spectral Application Range		400		1150	nm
λ_p	Spectral Response - Peak			925		nm
V_{BR}	Breakdown Voltage		50	140		V
$\theta_{1/2}$	Angular Resp. - 50% Resp. Pt.			±45		Degrees
NEP	Noise Equivalent Power			1.9×10^{-13} (Typ.)		$W/\sqrt{Hz}$
D*	Specific Detectivity			2.3×10^{12} (Typ.)		$cm\sqrt{Hz}$ / W

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