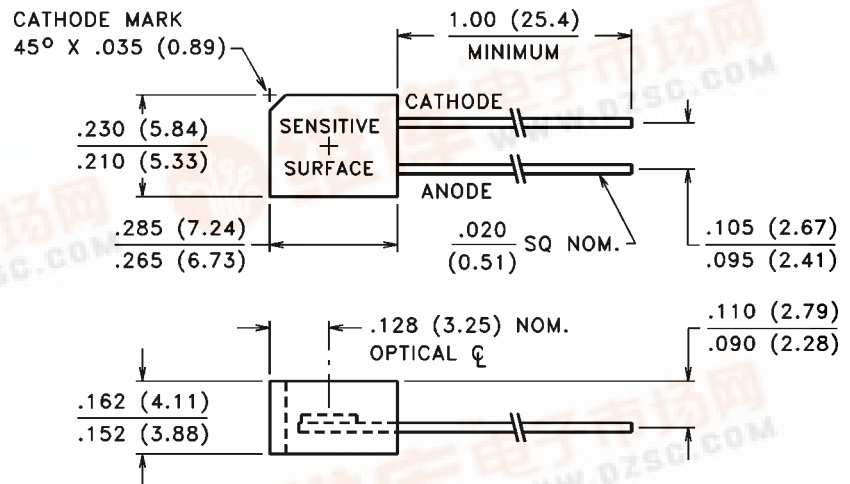


VTP Process Photodiodes

VTP100C



PACKAGE DIMENSIONS inch (mm)



CASE 52 FLAT SIDELOOKER

CHIP ACTIVE AREA: .012 in² (7.45 mm²)

PRODUCT DESCRIPTION

Planar silicon photodiode in a molded plastic side-looker package. The package material is clear. These diodes exhibit low dark current and fast speed of response.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature:

-40°C to 100°C

Operating Temperature:

-40°C to 100°C

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTP100C			UNITS
			Min.	Typ.	Max.	
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	50	70		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, V _R = 10 V			30	nA
R _{SH}	Shunt Resistance	H = 0, V = 10 mV		.25		GΩ
C _J	Junction Capacitance	H = 0, V = 3 V			50	pF
Re	Responsivity	940 nm		.050		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		30	140		V
θ _{1/2}	Angular Resp. - 50% Resp. Pt.			±70		Degrees
NEP	Noise Equivalent Power		9.0 × 10 ⁻¹⁴ (Typ.)			W/√Hz
	Specific Detectivity		3.0 × 10 ¹² (Typ.)			cm√Hz / W