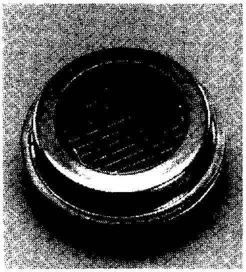
VTS-3 Process Photodiodes

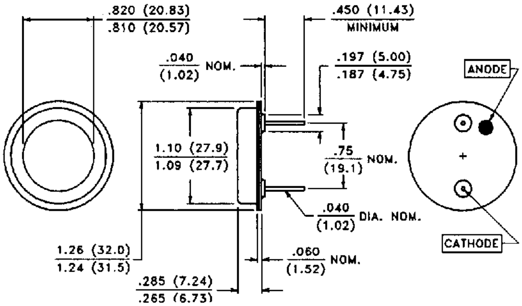
VTS7070A

E G & G VACTEC

T-90-01



PACKAGE DIMENSIONS inch (mm)



CASE 16 1.25" HERMETIC PACKAGE
CHIP ACTIVE AREA: .431 in^2 (278 mm^2)

PRODUCT DESCRIPTION

Large area planar silicon photodiode in a two lead, "flat" window hermetic package. Cathode is common to the case. This device has excellent response in the UV region and is designed for high output down to 220 nm.

ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -30°C to 75°C
Operating Temperature: -20°C to 60°C

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTS-3 curves, page 95)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTS7070A									UNITS
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
I_{SC}	Short Circuit Current	H = 10 fc, 2850 K	125	145								µA
TC I_{SC}	I_{SC} Temp. Coefficient	2850 K		.18								%/°C
I_{SC}	Short Circuit Current	40 µW/cm^2, 365 nm	5.7	16								µA
V_{OC}	Open Circuit Voltage	H = 100 fc, 2850 K		.20								V
I_D	Dark Current	H = 0, V_R = 100 mV		1.0	4.0							µA
R_{SH}	Shunt Resistance	H = 0, V = 10 mV		.06								MΩ
TC R_{SH}	R_{SH} Temp. Coefficient	H = 0, V = 10 mV		-11								%/°C
C_J	Junction Capacitance	H = 0, V = 0 V		2.5								nF
λ_{range}	Spectral Application Range		220		1050							nm
λ_p	Spectral Response - Peak			825								nm
S_R	Sensitivity	@ Peak		.50								A/W