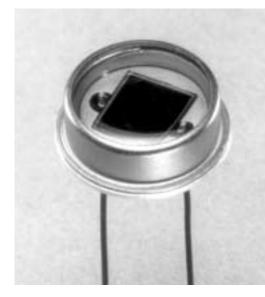
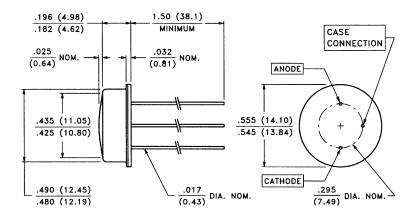
## **VTB Process Photodiodes**

# **VTB6061UV**



Large area planar silicon photodiode in a dual lead TO-8 package with a UV transmitting "flat" window. Cathode is common to the case. These diodes have very high shunt resistance and have good blue response.

### PACKAGE DIMENSIONS inch (mm)



CASE 15 TO-8 HERMETIC CHIP ACTIVE AREA: .058 in<sup>2</sup> (37.7 mm<sup>2</sup>)

#### **ABSOLUTE MAXIMUM RATINGS**

Storage Temperature:	-40°C to 110°C
Operating Temperature:	-40°C to 110°C

### ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTB curves, pages 21-22)

SYMBOL	CHARACTERISTIC TEST CONDITIONS		VTB6061UV			
			Min.	Тур.	Max.	- UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	260	350		μΑ
TC I <sub>SC</sub>	I <sub>SC</sub> Temperature Coefficient	2850 K		.12	.23	%/°C
V <sub>OC</sub>	Open Circuit Voltage	H = 100 fc, 2850 K		490		mV
TC V <sub>OC</sub>	V <sub>OC</sub> Temperature Coefficient	2850 K		-2.0		mV/°C
Ι <sub>D</sub>	Dark Current	H = 0, VR = 2.0 V			2.0	nA
R <sub>SH</sub>	Shunt Resistance	H = 0, V = 10 mV		.10		GΩ
TC R <sub>SH</sub>	R <sub>SH</sub> Temperature Coefficient	H = 0, V = 10 mV		-8.0		%/°C
CJ	Junction Capacitance	H = 0, V = 0		8.0		nF
S <sub>R</sub>	Sensitivity	365 nm		.10		A/W
S <sub>R</sub>	Sensitivity	220 nm	.04			A/W
$\lambda_{range}$	Spectral Application Range		200		1100	nm
λ <sub>p</sub>	Spectral Response - Peak			920		nm
V <sub>BR</sub>	Breakdown Voltage		2	40		V
$\theta_{1/2}$	Angular Resp 50% Resp. Pt.			±55		Degrees
NEP	Noise Equivalent Power		5.7 x 10 <sup>-14</sup> (Typ.) 1.1 x 10 <sup>-13</sup> (Typ.)			W∕√Hz
D*	Specific Detectivity			cm√Hz /W		