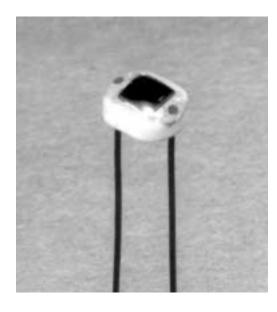
## **VTP Process Photodiodes**

# **VTP8350H**



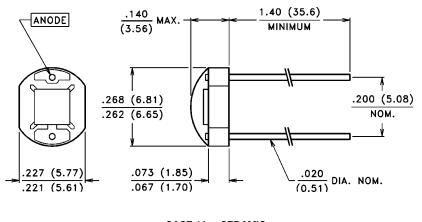
**PRODUCT DESCRIPTION** 

of response.

Planar silicon photodiode mounted on a two

lead ceramic substrate and coated with a thick layer of clear epoxy. These diodes exhibit low dark current under reverse bias and fast speed

#### PACKAGE DIMENSIONS inch (mm)



CASE 11 CERAMIC CHIP ACTIVE AREA: .012 in<sup>2</sup> (7.45 mm<sup>2</sup>)

### ABSOLUTE MAXIMUM RATINGS

-20°C to 75°C Storage Temperature: **Operating Temperature:** 

-20°C to 75°C

### **RoHS Compliant**



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTP8350H			
			Min.	Тур.	Max.	– UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	65	80		μA
TC I <sub>SC</sub>	I <sub>SC</sub> Temperature Coefficient	2850 K		.20		%/°C
V <sub>OC</sub>	Open Circuit Voltage	H = 100 fc, 2850 K		350		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 = 10 V			30	nA
R <sub>SH</sub>	Shunt Resistance	H = 0, V = 10 mV		100		GΩ
CJ	Junction Capacitance	H = 0, V = 3 V			50	pF
Re	Responsivity	940 nm		.06		A/(W/cm <sup>2</sup> )
S <sub>R</sub>	Sensitivity	@ Peak		.55		A/W
$\lambda_{range}$	Spectral Application Range		400		1150	nm
λ <sub>p</sub>	Spectral Response - Peak			925		nm
V <sub>BR</sub>	Breakdown Voltage		33	140		V
θ <sub>1/2</sub>	Angular Resp 50% Resp. Pt.			±60		Degrees
NEP	Noise Equivalent Power		1.8 x 10 <sup>-13</sup> (Typ.)			W∕√Hz
D*	Specific Detectivity		1.5 x 10 <sup>12</sup> (Typ.)			cm√Hz/W

PerkinElmer Optoelectronics, 22001 Dumberry, Vaudreuil, Canada J7V 8P7

Phone: 877-734-6786 Fax: 450-424-3413 www.perkinelmer.com/opto

