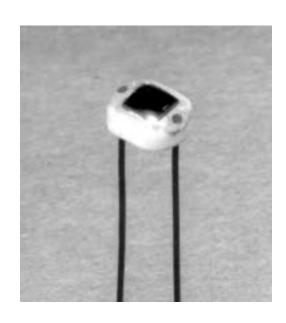
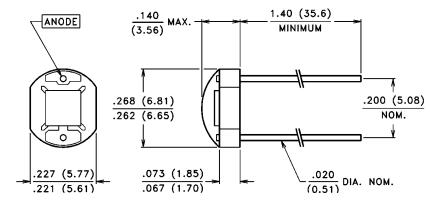
# **VTP Process Photodiodes**

## VTP8350H



### PACKAGE DIMENSIONS inch (mm)



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

#### PRODUCT DESCRIPTION

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 of response.

#### **ABSOLUTE MAXIMUM RATINGS**

Storage Temperature: -20°C to 75°C

Operating Temperature: -20°C to 75°C

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTP8350H			LIMITC
			Min.	Тур.	Max.	- UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	65	80		μΑ
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
I <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
СЈ	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
$\lambda_{\mathrm{p}}$	Spectral Response - Peak			925		nm
$V_{BR}$	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

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