

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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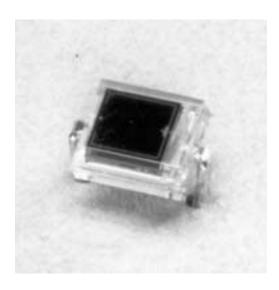






## **VTP Process Photodiodes**

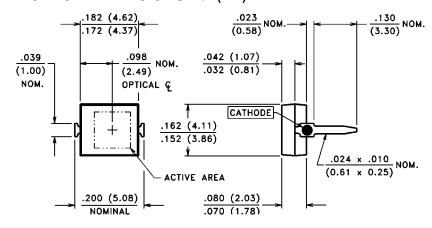
## VTP8551H



### PRODUCT DESCRIPTION

Planar silicon photodiode in a transparent molded plastic package. Suitable for direct mounting to P.C.B. Arrays can be formed by positioning these devices side by side. These diodes exhibit low dark current under reverse bias and fast speed of response.

#### PACKAGE DIMENSIONS inch (mm)



CASE 22 MINI-DIP CHIP ACTIVE AREA: .012 in<sup>2</sup> (7.45 mm<sup>2</sup>)

#### ABSOLUTE MAXIMUM RATINGS

Storage Temperature: -40°C to 85°C Operating Temperature: -40°C to 85°C

### **RoHS Compliant**



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTP8551H			LINUTO
			Min.	Тур.	Max.	- UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	50	70		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
I <sub>D</sub>	Dark Current	H = 0, VR = 10 V			30	nA
R <sub>SH</sub>	Shunt Resistance	H = 0, V = 10 mV		.15		GΩ
CJ	Junction Capacitance	H = 0, V = 3 V			50	pF
Re	Responsivity	940 nm		.05		A/(W/cm <sup>2</sup> )
S <sub>R</sub>	Sensitivity	@ Peak		.55		A/W
$\lambda_{range}$	Spectral Application Range		400		1150	nm
$\lambda_{p}$	Spectral Response - Peak			925		nm
$V_{BR}$	Breakdown Voltage		33	140		V
$\theta_{1/2}$	Angular Resp 50% Resp. Pt.			±50		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