

---

# VTP Process Photodiodes

---

## VTP PROCESS FAST RESPONSE, HIGH DARK RESISTANCE

### FEATURES

- *Visible to enhanced IR spectral range*
- *Integral visible rejection filters available*
- *Response @ 940 nm, 0.60 A/W, typical*
- *-1 to 2% linearity over 7 to 9 decades*
- *Low dark currents*
- *High shunt resistance*
- *High reverse voltage rating*
- *Low capacitance*

### PRODUCT DESCRIPTION

Photodiodes in this series have been designed for low junction capacitance. The lower the capacitance, the faster the response of the diode. Also, speed can be further increased by reverse biasing the diodes which lowers the capacitance even more.

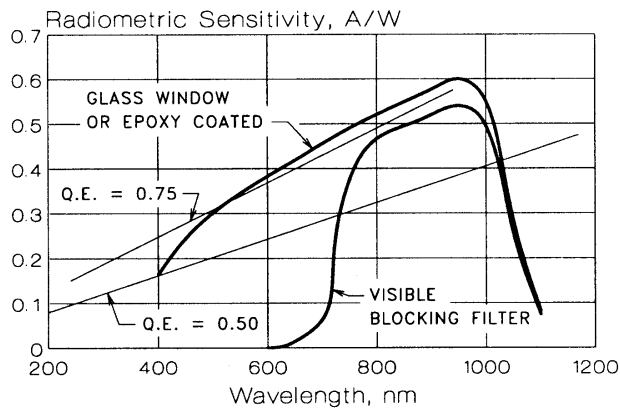
These diodes have excellent response in the IR region and are well matched to IR LEDs. Responsivity is categorized at 940 nm (GaAs LED). Some diodes are available in packages which incorporate a visible rejection filter effectively blocking any light below 700 nm.

Diodes made with the VTP process are suitable for operation under reverse bias conditions but may be used in the photovoltaic mode. Typical reverse breakdown voltages are around 140 V. Low dark currents under reverse bias are also a feature of this series.

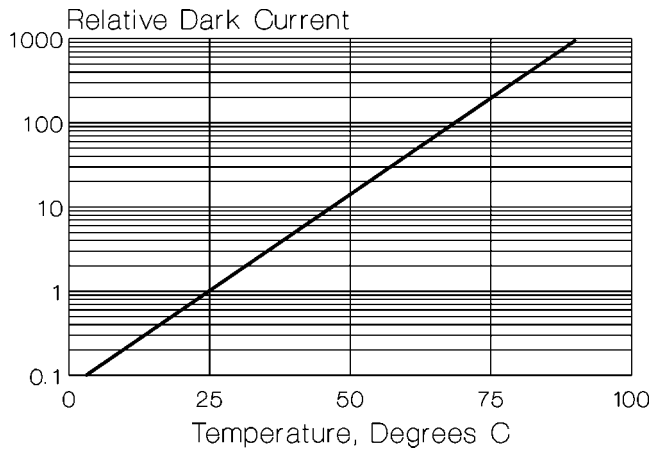
# VTP Process Photodiodes

## TYPICAL CHARACTERISTIC CURVES @ 25°C (UNLESS OTHERWISE NOTED)

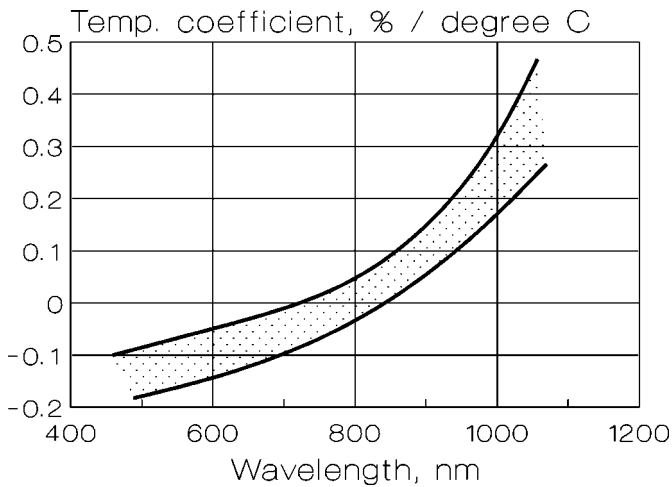
**Absolute Spectral Response**



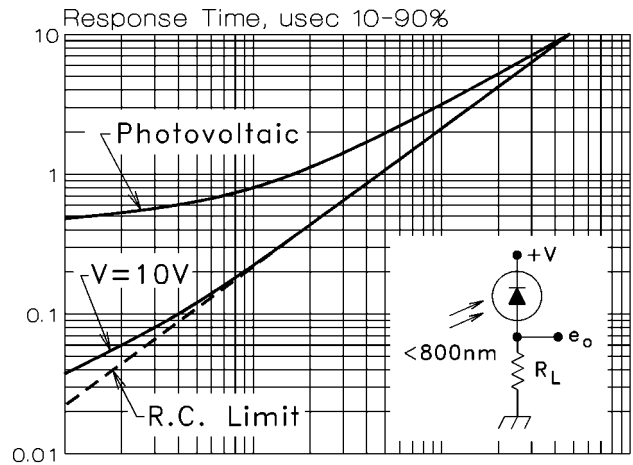
**Relative Dark Current vs. Temperature**



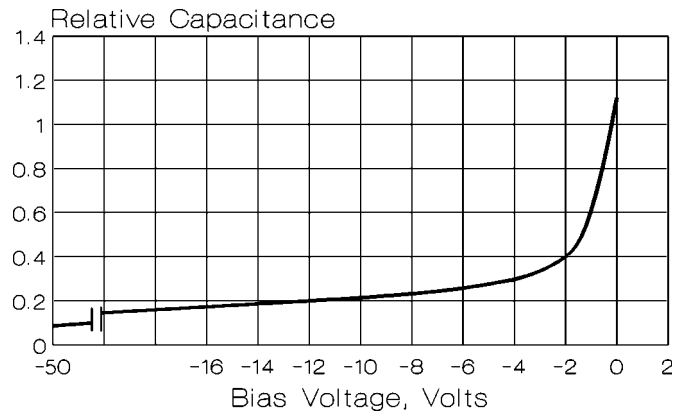
**Temperature Coefficient Of Light Current vs. Wavelength**



**Rise/Fall Times - Non Saturated**



**Relative Junction Capacitance vs. Voltage (Referred To Zero Bias)**



**Relative Short Circuit Current vs. Illumination**

