

### FEATURES

- 1.0 mm square active area
- Low dark current
- Fast response time
- High speed epitaxy

### DESCRIPTION

1.0 mm<sup>2</sup> High Speed Epitaxy Photodiode with P on N construction. Hermetically packaged in a TO-52-S1 with a clear borosilicate glass window cap.

### APPLICATIONS

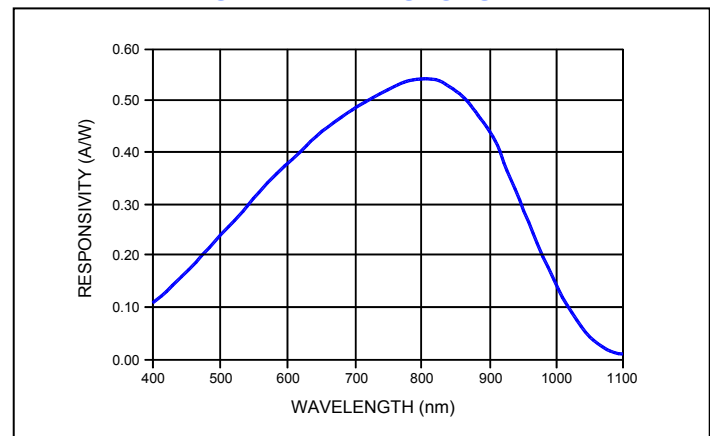
- High speed photometry
- Optical communications
- Pulsed light detection
- Fiber optic light monitoring



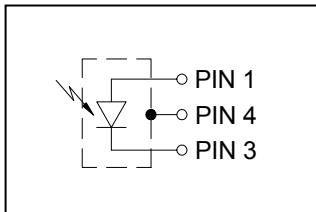
### ABSOLUTE MAXIMUM RATING

SYMBOL	PARAMETER	MIN	MAX	UNITS
T <sub>STG</sub>	Storage Temp	-55	+125	°C
T <sub>OP</sub>	Operating Temp	-40	+100	°C
V <sub>R(OP)</sub>	Reverse Operating Voltage	-	50	V
I <sub>(PEAK)</sub>	Peak DC Current	-	10	mA

### SPECTRAL RESPONSE



### SCHEMATIC



### ELECTRO-OPTICAL CHARACTERISTICS @ 22° C

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
R <sub>SH</sub>	Shunt Resistance	V <sub>R</sub> = ±10 mV	100	200	---	MΩ
I <sub>D</sub>	Dark Current	V <sub>R</sub> = 20 V	---	0.5	2.0	nA
C	Capacitance	V <sub>R</sub> = 0 V	---	20	---	pF
		V <sub>R</sub> = 20 V	---	3.5	---	
	Responsivity	V <sub>R</sub> = 0 V; λ = 632 nm	---	0.40	---	A/W
		V <sub>R</sub> = 0 V; λ = 800 nm	---	0.52	---	
NEP	Noise Equivalent Power	V <sub>R</sub> = 0 V; λ = 850 nm; R <sub>L</sub> = 50 Ω	---	5.0 X 10 <sup>-15</sup>	---	W/Hz <sup>1/2</sup>
		V <sub>R</sub> = 20 V; λ = 850 nm; R <sub>L</sub> = 50 Ω	---	2.0 X 10 <sup>-14</sup>	---	
V <sub>BR</sub>	Breakdown Voltage	I <sub>R</sub> = 10 μA	40	50	---	V
t <sub>r</sub>	Rise Time	V <sub>R</sub> = 20 V; λ = 800 nm; R <sub>L</sub> = 50 Ω	---	1.0	---	ns

Disclaimer: Due to our policy of continued development, specifications are subject to change without notice.

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