

### FEATURES

- 4 X 1.20 mm square active area
- Small gap
- Low dark current
- High resolution

### DESCRIPTION

4 X 1.44 mm<sup>2</sup> Low Dark Current Quadrant Photodiode with P on N construction and 50 μm gaps. Hermetically packaged in a TO-5 with a clear borosilicate glass window cap.

### APPLICATIONS

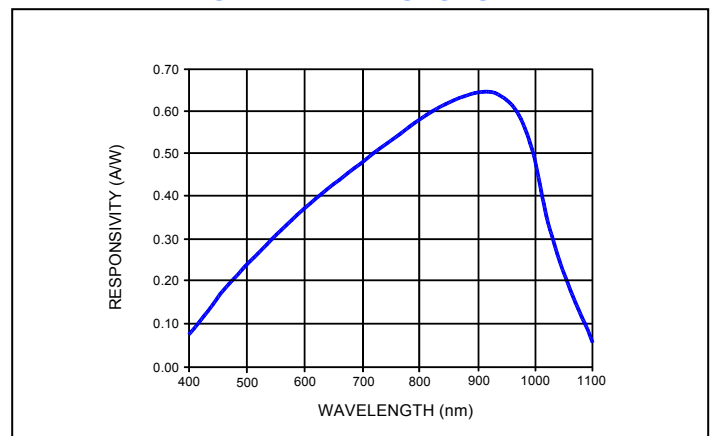
- Laser beam position sensor
- Autocollimators
- Optical tweezers
- Ellipsometers



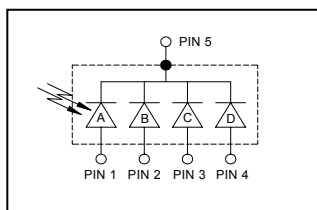
### ABSOLUTE MAXIMUM RATING

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
I <sub>D</sub>	Dark Current*	V <sub>R</sub> = 10 V	---	0.4	---	nA
C	Capacitance*	V <sub>R</sub> = 10 V	---	---	5.5	pF
	Responsivity	V <sub>R</sub> = 0 V; λ = 633 nm	---	0.40	---	A/W
		V <sub>R</sub> = 0 V; λ = 900 nm	---	0.64	---	
V <sub>BR</sub>	Breakdown Voltage	I <sub>R</sub> = 10 μA	---	15	---	V
t <sub>r</sub>	Rise Time	V <sub>R</sub> = 10 V; λ = 850 nm; R <sub>L</sub> = 50 Ω	---	20	---	ns
	Uniformity of Sensitivity	V <sub>R</sub> = 10 V; λ = 880 nm	---	±1	±2	%

\* per element

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

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