

**FEATURES**

- $\varnothing$  7.80 mm active area
- Small gap
- Low dark current
- High resolution

**DESCRIPTION**

4 X 11.78 mm<sup>2</sup> Low Dark Current Quadrant Photodiode with P on N construction and 42  $\mu$ m gaps. Surface mount packaged with clear epoxy encapsulant.

**APPLICATIONS**

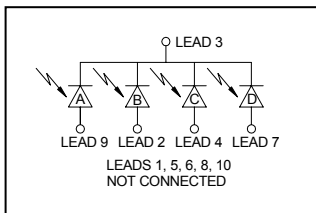
- Laser beam position sensor
- Autocollimators
- Optical tweezers
- Ellipsometers



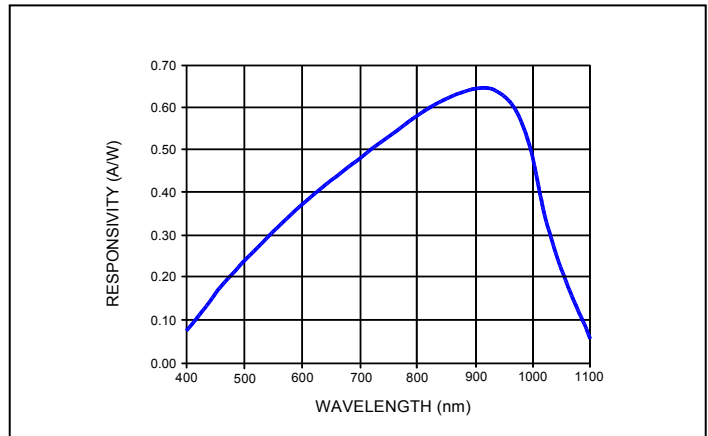
**ABSOLUTE MAXIMUM RATING**

SYMBOL	PARAMETER	MIN	MAX	UNITS
T <sub>STG</sub>	Storage Temp	-15	+80	°C
T <sub>OP</sub>	Operating Temp	-15	+60	°C
V <sub>R(OP)</sub>	Reverse Operating Voltage	-	50	V
I <sub>(PEAK)</sub>	Peak DC Current	-	10	mA

**SCHEMATIC**



**SPECTRAL RESPONSE**



**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	---	2.0	---	nA
C	Capacitance*	V <sub>R</sub> = 10 V	---	---	25.0	pF
	Responsivity	V <sub>R</sub> = 0 V; $\lambda$ = 633 nm	---	0.40	---	A/W
		V <sub>R</sub> = 0 V; $\lambda$ = 900 nm	---	0.64	---	
V <sub>BR</sub>	Breakdown Voltage	I <sub>R</sub> = 10 $\mu$ A	---	15	---	V
t <sub>r</sub>	Rise Time	V <sub>R</sub> = 10 V; $\lambda$ = 850 nm; R <sub>L</sub> = 50 $\Omega$	---	40	---	ns
	Uniformity of Sensitivity	V <sub>R</sub> = 10 V; $\lambda$ = 880 nm	---	$\pm$ 1	$\pm$ 2	%

\* per element

Disclaimer: Due to our policy of continued development, specifications are subject to change without notice. Package is not suitable for reflow soldering.

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