

FEATURES

- 6.0 mm X 1.0 mm active area
- High linearity
- High position resolution
- High NIR sensitivity

DESCRIPTION

6.0 mm² Single Axis Position Sensing Detector (PSD). Packaged in a molded plastic surface mount SO16.

APPLICATIONS

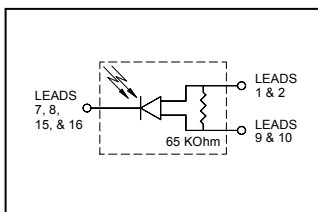
- Distance measurement (triangulation)
- Optoelectronic displacement transducer
- Proximity sensor



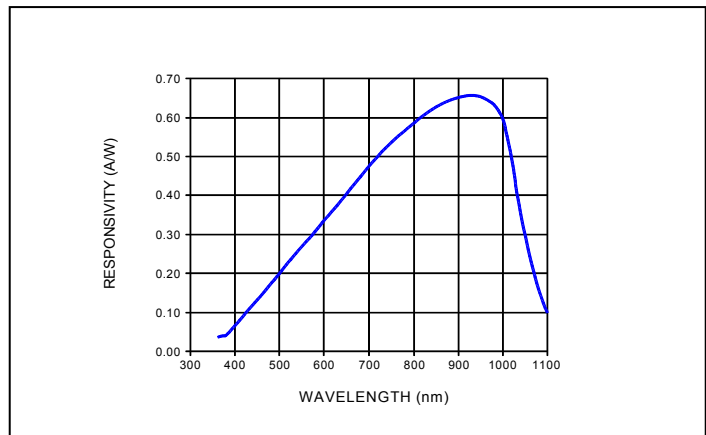
ABSOLUTE MAXIMUM RATING

SYMBOL	PARAMETER	MIN	MAX	UNITS
T _{STG}	Storage Temp	-20	+80	°C
T _{OP}	Operating Temp	-20	+60	°C
V _{R(OP)}	Reverse Operating Voltage	-	50	V
I _(PEAK)	Peak DC Current	-	10	mA

SCHEMATIC



SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS @ 22° C

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _D	Dark Current	V _R = 10 V	---	10.0	---	nA
C	Capacitance	V _R = 10 V	---	15	---	pF
	Responsivity	V _R = 0 V; λ = 633 nm	---	0.40	---	A/W
		V _R = 0 V; λ = 850 nm	---	0.62	---	
V _{BR}	Breakdown Voltage	I _R = 10 μA	15	---	---	V
t _r	Rise Time ¹⁾	V _R = 10 V; λ = 865 nm; R _L = 50 Ω	---	0.2	---	μs
	Interelectrode Resistance	E = 0 lx	---	65	---	kΩ
	Noise Limited Resolution	λ = 632 nm; 0.50 μW; ∅0.5 mm spot	---	0.05	---	μm
	Position Detection Error ²⁾	λ = 632 nm	---	±1.0	---	%

1) central spot position 2) within the scan range spot diameter 0.5 mm

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

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