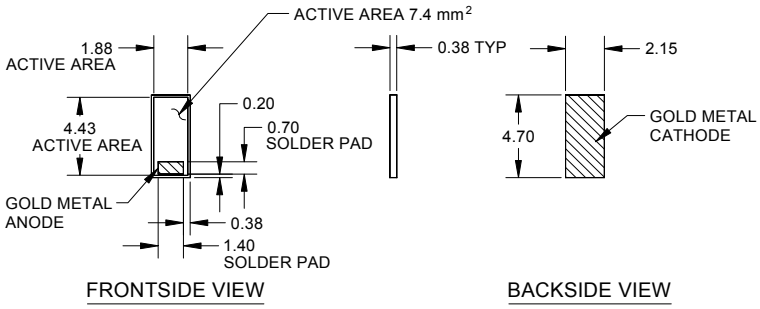
PACIFIC SILICON SENSOR Incorporated

Pacific Silicon Sensor Solderable Series Data Sheet

Part Description PR7.4-6-S-CH

Order # 41-065



FEATURES

- 1.88 mm X 4.43 mm active area
- Low dark current
- Fast response time
- RoHS compliant

DESCRIPTION

7.4 mm^2 Low Dark Current Photodiode Chip with P on N construction. Chips have special metallization designed for soldered wire connections. Available on stretch rings, or mylar tape or as bare die in chip trays.

APPLICATIONS

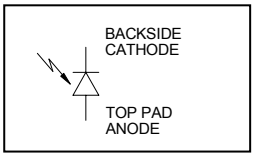
- Precision photometry
- Bar code readers
- Medical equipment
- Pulsed light sensor

RoHS COMPLIANT

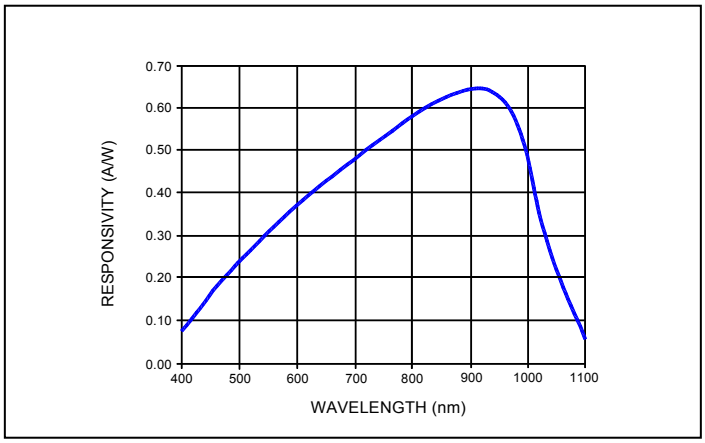
ABSOLUTE MAXIMUM RATING

SYMBOL	PARAMETER	MIN	MAX	UNITS
T_{STG}	Storage Temp	-55	+125	°C
T_{OP}	Operating Temp	-40	+100	°C
$T_{SOLDERING}$	Soldering Temp < 30 seconds per side		+280	°C
$V_{R(OP)}$	Reverse Operating Voltage	-	50	V
$I_{(PEAK)}$	Peak DC Current	-	10	mA

SCHEMATIC



SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS @ 25° C

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
R_{SH}	Shunt Resistance	V_R = ±10 mV	500	1000	---	MΩ
I_D	Dark Current	V_R = 10 V	---	0.5	5	nA
C	Capacitance	V_R = 0 V;	---	65	---	pF
	Responsivity	V_R = 0 V; λ = 633 nm	---	0.40	---	A/W
		V_R = 0 V; λ = 900 nm	---	0.60	---	
NEP	Noise Equivalent Power	V_R = 20 V; λ = 850 nm; R_L = 50 Ω		2.0 X 10^{-14}		W/Hz$^{1/2}$
V_{BR}	Breakdown Voltage	I_R = 10 µA	15	30	---	V
t_r	Rise Time	V_R = 10 V; λ = 850 nm; R_L = 50 Ω	---	40	---	ns

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

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