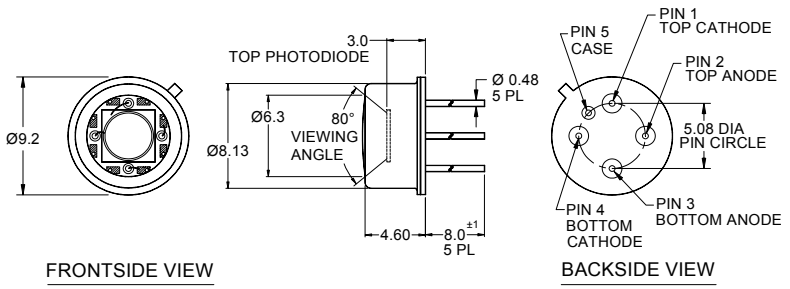
Pacific Silicon Sensor Series 6 Data Sheet
Part Description Two Color Detector
Order # 03-299



FEATURES

- ∅ 3.57 mm active area
- Low dark current
- Long term stability
- High shunt resistance

DESCRIPTION

Two 10.0 mm^2 Low Dark Current PIN Photodiodes stacked vertically. The top photodiode has a full spectrum response while the bottom photodiode sees only Near InfraRed light. Hermetically packaged in a TO-5 with a clear borosilicate glass window cap. For alternate pin configuration see data sheet 03-304.

APPLICATIONS

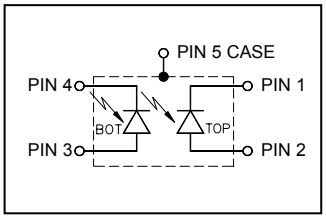
- Dual wavelength power meters
- Remote color temperature sensing

RoHS COMPLIANT

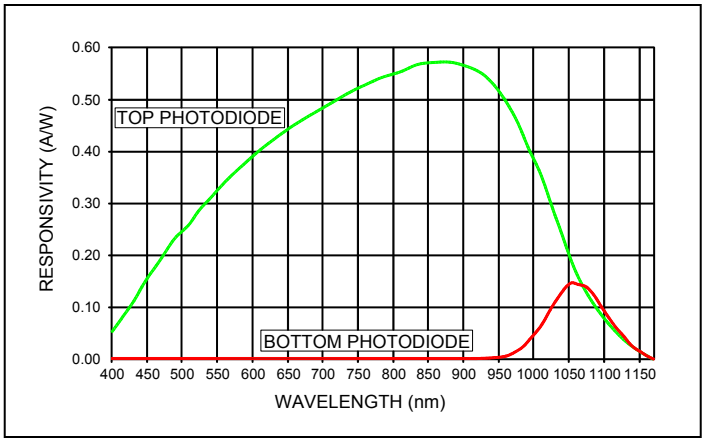
ABSOLUTE MAXIMUM RATING

SYMBOL	PARAMETER	MIN	MAX	UNITS
T_{STG}	Storage Temp	-55	+125	°C
T_{OP}	Operating Temp	-40	+100	°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
R_{SH}	Shunt Resistance	V_R = ±10 mV	100	500	---	MΩ
I_D	Dark Current	V_R = 10 V	---	2	---	nA
C	Capacitance	V_R = 0 V;	---	350	---	pF
		V_R = 10 V;	110	150	---	
	Responsivity (Top)	V_R = 0 V; λ = 950 nm	---	0.50	---	A/W
	Responsivity (Bottom)	V_R = 0 V; λ = 1050 nm	---	0.14	---	
NEP	Noise Equivalent Power	V_R = 0 V; λ = 850 nm; R_L = 50 Ω	---	5.0 X 10^{-14}	---	W/Hz$^{1/2}$
V_{BR}	Breakdown Voltage	I_R = 10 µA	20	---	---	V
t_r	Rise Time	V_R = 10 V; λ = 1000 nm; R_L = 50 Ω	---	10	---	µs

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

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