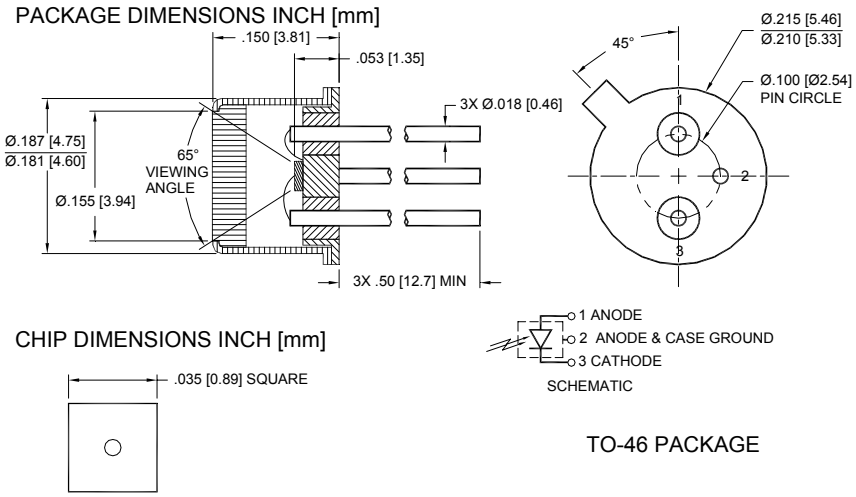
GaAlAs IR Photodiode
PDI-G103



FEATURES

- Narrow response
- Daylight filtered
- Low cost

DESCRIPTION

The **PDI-G103** is a GaAlAs photodiode with a spectral peak at 880nm and is immune to other ambient light. It is packaged in a TO-46 can package.

APPLICATIONS

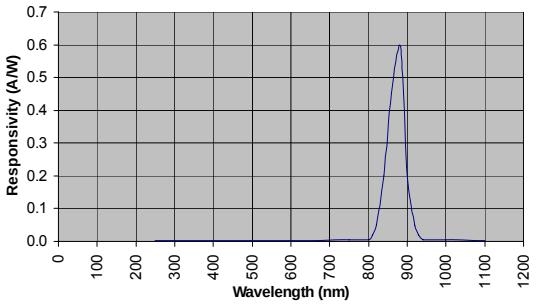
- I.R. LED sensor
- I.R. links
- Industrial controls
- I.R. proximity sensor

ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		100	V
T_{STG}	Storage Temperature	-55	+100	°C
T_O	Operating Temperature	-40	+100	°C
T_S	Soldering Temperature*		+240	°C

* 1/16 inch from case for 3 seconds max.

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{SC}	Short Circuit Current	H = 100 fc, 2850 K	5	6		μA
I_D	Dark Current	V_R = 5V		0.2	2	nA
R_{SH}	Shunt Resistance	V_R = 10 mV	1	3		GΩ
C_J	Junction Capacitance	V_R = 5V, f = 1 MHz		90		pF
λrange	Spectral Application Range	Spot Scan	840		940	nm
R	Responsivity	λ= 880nm V, V_R = 0 V		0.60		A/W
V_{BR}	Breakdown Voltage	I = 10μA	20	30		V
NEP	Noise Equivalent Power	V_R = 10V @ λ=Peak		$1X10^{-13}$		W/$\sqrt{}$ Hz
t_r	Response Time**	RL = 50 Ω, V_R = 5V		190		nS

**Response time of 10% to 90% is specified at 660nm wavelength light.

Advanced Photonix Inc. 1240 Avenida Acaso, Camarillo CA 93012 • Phone (805) 987-0146 • Fax (805) 484-9935 • www.advancedphotonix.com