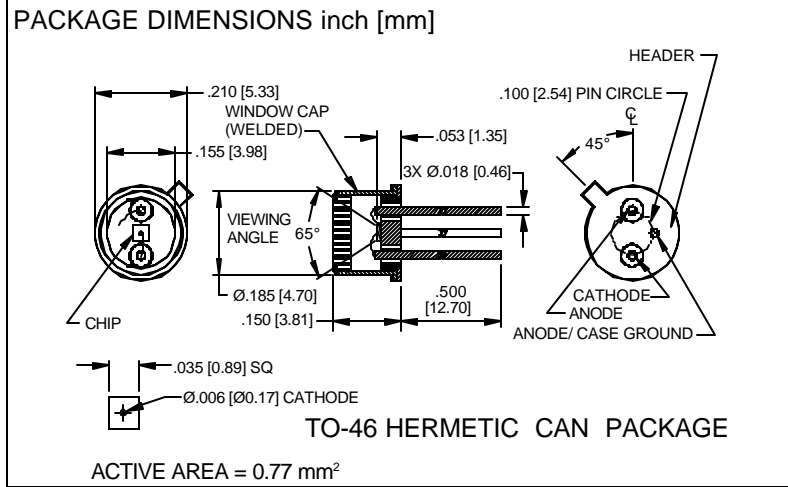


PHOTONIC DETECTORS INC.

GaAlAs (880 nm peak) Photodiode Type PDI-G103



FEATURES

- Matched to NIR LEDs
- Daylight filtered
- Low cost
- .60 A/W at 880 nm

DESCRIPTION

The **PDI-G103** is a GaAlAs LPE processed photodiode, with a spectral peak at 880 nm. Matched to the emission spectrum of GaAlAs, 880 nm LEDs. This detector is immune to other ambient light. Packaged in an isolated hermetic TO-46 with a flat window.

APPLICATIONS

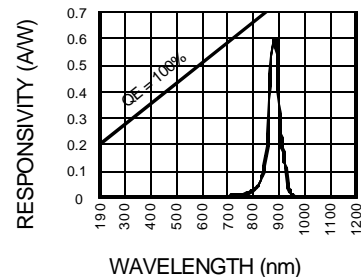
- I.R. LED sensor
- I.R. links
- Industrial controls
- I.R. proximity sensor

ABSOLUTE MAXIMUM RATING (TA=25°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 Range	-40	+100	°C
T _S	Soldering Temperature*		+240	°C
I _L	Light Current		500	mA

*1/16 inch from case for 3 secs max

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{SC}	Short Circuit Current	H = 500 fc, 2850 K	5	6		μA
I _D	Dark Current	H = 0, V _R = 5 V		.2	2	nA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	1	3		GΩ
TC R _{SH}	RSH Temp. Coefficient	H = 0, V _R = 10 mV		-10		% / °C
C _J	Junction Capacitance	H = 0, V _R = 5 V**		90		pF
λ _{range}	Spectral Application Range	Spot Scan	840		940	nm
λ _p	Spectral Response - Peak	Spot Scan		880		nm
V _{BR}	Breakdown Voltage	I = 10 μA	20	30		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		1x10 ⁻¹³		W/√Hz
tr	Response Time	RL = 50 Ω V _R = 5 V		1		μS

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. ** f = 1MHz

[FORM NO. 100-PDI-G103 REV N/C]