

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

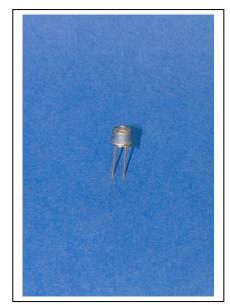
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

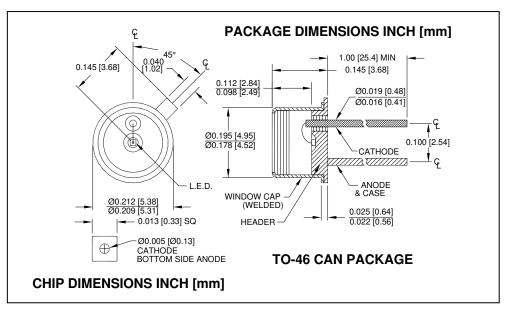












#### **FEATURES**

- · High output power
- · High reliability
- · Wide emission angle

## **DESCRIPTION**

The **PDI-E801** is an 880 nm high power GaAlAs infrared emitter packaged in a hermetic TO-46 metal header with a flat window glass.

#### **APPLICATIONS**

- · Photoelectric switches
- Optical encoders
- · Infrared sources

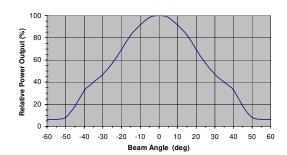


#### ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
$P_d$	Power Dissipation		160	mW
I <sub>f</sub>	Continuous Forward Current		100	mA
I <sub>p</sub>	Peak Forward Current		3.0	Α
$V_{r}$	Reverse Voltage		5	V
T <sub>STG</sub>	Storage Temperature	-55	+100	°C
To	Operating Temperature	-55	+100	°C
Ts	Soldering Temperature*		+240	°C

<sup>\* 1/16</sup> inch from case for 3 seconds max.

# **RADIATION PATTERN**



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P <sub>o</sub>	Output Power	$I_f = 100 \text{ mA}$	4	5.6		mW
$V_{f}$	Forward Voltage	$I_f = 100 \text{ mA}$		1.5	1.9	٧
$V_r$	Reverse Breakdown Voltage	$I_f = 10 \mu A$	5	30		V
$\lambda_{p}$	Peak Wavelength	$I_f = 20 \text{ mA}$	865	880	895	nm
$\Delta \lambda$	Spectral Bandwidth @ 50% (FWHM)	$I_f = 20 \text{ mA}$		65		nm
C <sub>t</sub>	Terminal Capacitance	$V_r = 0V$ , $f = 1MHz$		15		pF
t <sub>r</sub>	Rise Time	$I_f = 20 \text{ mA}$		0.75		uS
t <sub>f</sub>	Fall Time	$I_f = 20 \text{ mA}$		0.40		uS

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. © 2007 Advanced Photonix, Inc. All rights reserved.