



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!



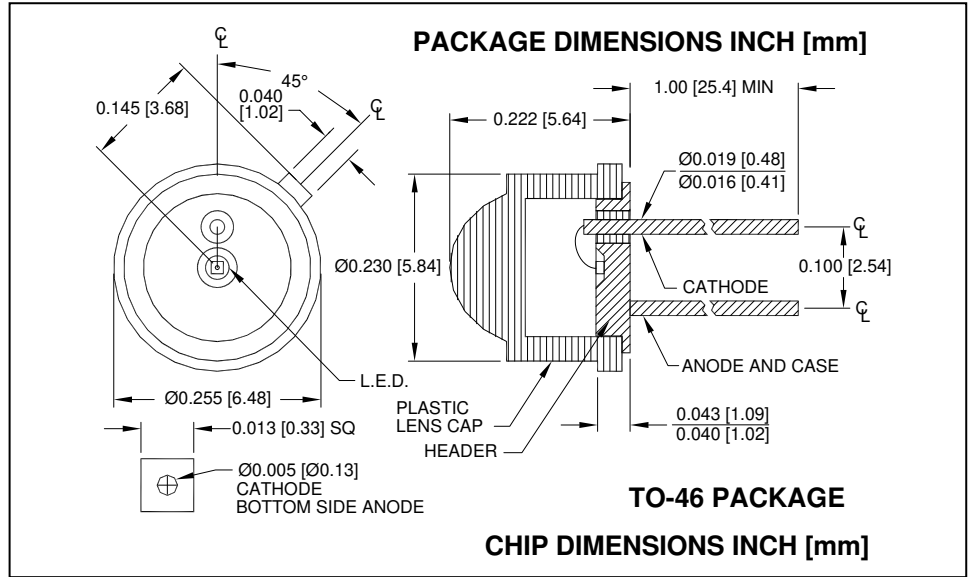
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**FEATURES**

- High output power
- High reliability
- Narrow emission angle

**DESCRIPTION**

The **PDI-E805** is an 880 nm high power GaAlAs infrared emitter packaged in a TO-46 metal header with a clear plastic lens cap.

**APPLICATIONS**

- Photoelectric switches
- Infrared sources
- Optical readers

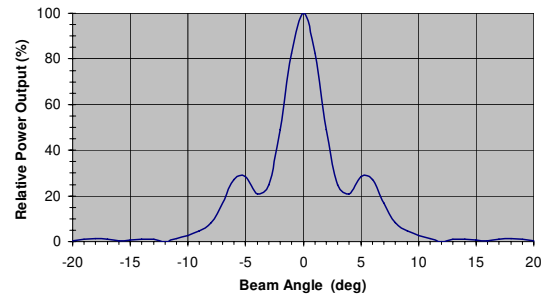


**ABSOLUTE MAXIMUM RATING** (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
P <sub>d</sub>	Power Dissipation		160	mW
I <sub>f</sub>	Continuous Forward Current		100	mA
I <sub>p</sub>	Peak Forward Current		3.0	A
V <sub>r</sub>	Reverse Voltage		5	V
T <sub>STG</sub>	Storage Temperature	-20	+90	°C
T <sub>O</sub>	Operating Temperature	-20	+90	°C
T <sub>S</sub>	Soldering Temperature*		+240	°C

\* 1/16 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 <sub>f</sub> = 100 mA	8.5	10		mW
V <sub>f</sub>	Forward Voltage	I <sub>f</sub> = 100 mA		1.5	1.9	V
V <sub>r</sub>	Reverse Breakdown Voltage	I <sub>f</sub> = 10 μA	5	30		V
λ <sub>p</sub>	Peak Wavelength	I <sub>f</sub> = 20 mA	865	880	895	nm
Δλ	Spectral Bandwidth @ 50% (FWHM)	I <sub>f</sub> = 20 mA		65		nm
C <sub>t</sub>	Terminal Capacitance	V <sub>r</sub> = 0V, f = 1MHz		15		pF
t <sub>r</sub>	Rise Time	I <sub>f</sub> = 20 mA		0.75		μS
t <sub>f</sub>	Fall Time	I <sub>f</sub> = 20 mA		0.40		μS

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