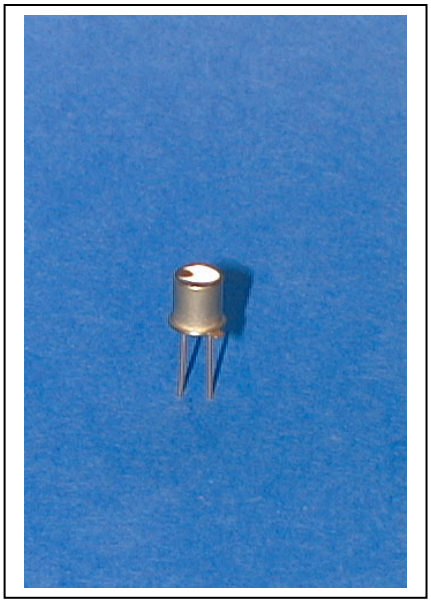
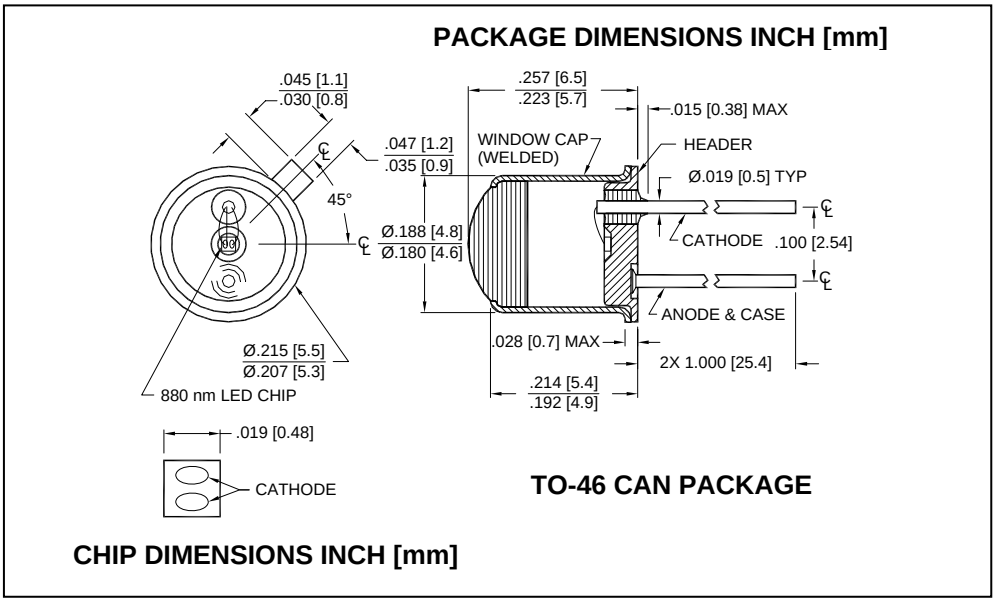
GaAlAs High power IR LED Emitters
PDI-E813





FEATURES

- High output power
- High reliability
- Medium emission angle

DESCRIPTION

The **PDI-E813** is a high power GaAlAs infrared emitter, packaged in a hermetic TO-46 metal header with a dome window glass.

APPLICATIONS

- Photoelectric switches
- Infrared sources
- Optical readers

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
P_d	Power Dissipation		360	mW
I_f	Continuous Forward Current		180	mA
I_p	Peak Forward Current		3.0	A
V_r	Reverse Voltage		3	V
T_{STG}	Storage Temperature	-55	+125	°C
T_O	Operating Temperature	-55	+125	°C
T_S	Soldering Temperature*		+240	°C

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

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_o	Output Power	I_f = 100 mA	7.0	15		mW
V_f	Forward Voltage	I_f = 100 mA		1.5	1.9	V
Ir	Reverse current	Vr = -3V			10	uA
λ_p	Peak Wavelength	I_f = 50 mA	865	880	895	nm
$\Delta\lambda$	Spectral Halfwidth	I_f = 50 mA		80		nm
R_d	Dynamic Resistance	I_f = 100mA		1.2		Ohms
t_r	Rise Time	I_f = 20 mA		0.6		uS
t_f	Fall Time	I_f = 20 mA		0.5		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.

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