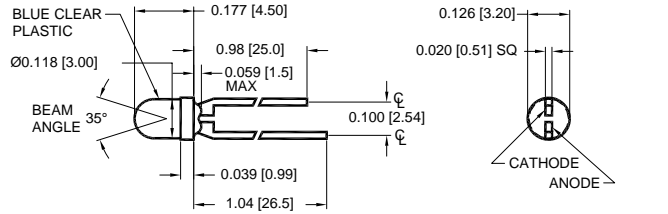


PACKAGE DIMENSIONS INCH [mm]



T 1 ¾ PACKAGE

## FEATURES

- High output power
- High reliability
- Medium emission angle

## DESCRIPTION

The **PDI-E808-A** is a high power GaAlAs infrared emitter, packaged in a low cost T 1 ¾ plastic package.

## APPLICATIONS

- Photoelectric switches
- Infrared sources
- Automatic controls

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
P <sub>d</sub>	Power Dissipation		200	mW
I <sub>f</sub>	Continuous Forward Current		100	mA
I <sub>p</sub>	Peak Forward Current		1	A
V <sub>r</sub>	Reverse Voltage		5	V
T <sub>STG</sub>	Storage Temperature	-65	+125	°C
T <sub>O</sub>	Operating Temperature	-65	+125	°C
T <sub>S</sub>	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 <sub>o</sub>	Radiant Intensity	I <sub>f</sub> = 100 mA	12		30	mW/Sr
V <sub>f</sub>	Forward Voltage	I <sub>f</sub> = 100 mA		1.5	2.0	V
V <sub>r</sub>	Reverse Breakdown Voltage	I <sub>f</sub> = 100 μA	5	30		V
λ <sub>p</sub>	Peak Wavelength	I <sub>f</sub> = 50 mA		880		nm
Δλ	Spectral Halfwidth	I <sub>f</sub> = 50 mA		70		nm
C <sub>t</sub>	Terminal Capacitance	V <sub>r</sub> = 0V, f = 1MHz		20		pF
I <sub>R</sub>	Reverse Current	V <sub>r</sub> = 4V		10		uA
t <sub>r</sub>	Rise Time	I <sub>f</sub> = 20 mA		1.5		uS
t <sub>f</sub>	Fall Time	I <sub>f</sub> = 20 mA		0.8		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.