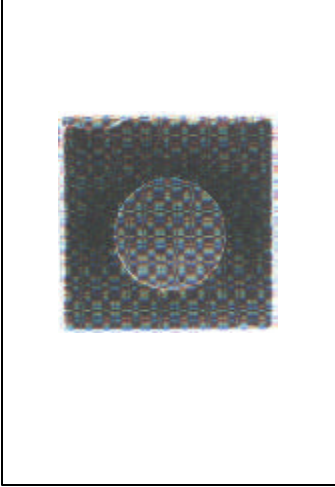


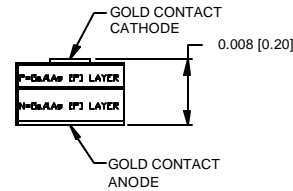
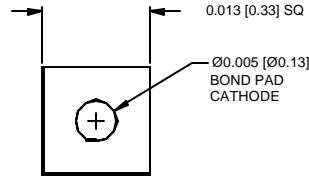
PHOTONIC DETECTORS INC.

High-Power GaAlAs Infrared Emitter Chip Peak Wavelength, 880 nm, Type PDI-E800



PACKAGE DIMENSIONS inch (mm)

INDUSTRY EQUIVALENT
OPC226



FEATURES

- High output power
- Low degradation
- High reliability

DESCRIPTION: The PDI-E800 infrared emitting diode uses high reliability liquid phase epitaxially grown GaAlAs. They are optimized for high power, high efficiency, and low degradation.

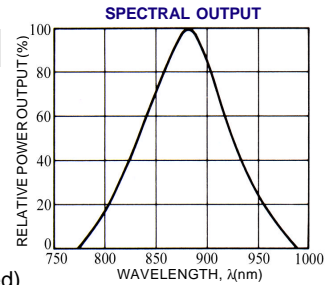
APPLICATIONS

- Photoelectric switches
- Solid state switches
- Infrared sources

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

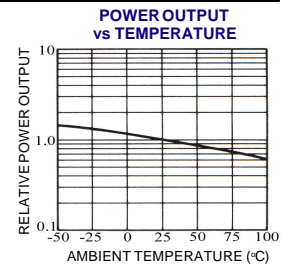
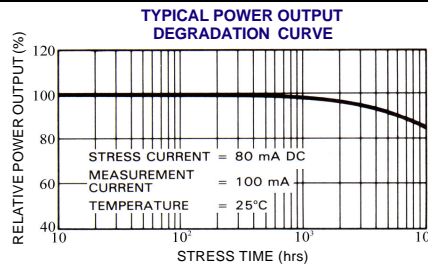
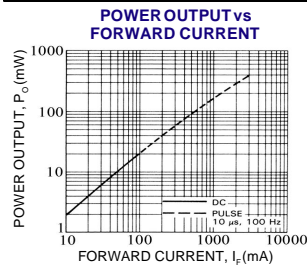
SYMBOL	PARAMETER	MIN	MAX	UNITS
Pd	Power Dissipation		160	mW
I _{FP}	Continuous Forward Current		100	mA
I _{FP}	Peak Forward Current (10µs, 10Hz)		2.5	A
V _R	Reverse voltage		5	V
To & Ts	Light Current	-35	+100	°C
TS	Soldering Temperature*		+240	°C

*1/16 inch from case for 3 secs max



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _O	Output Power	I _F = 100 mA	20	24		mW
V _F	Forward Voltage	I _F = 100 mA		1.50	1.90	V
V _R	Reverse Breakdown Voltage	I _F = 10 mA	5	30		V
λ _P	Peak Wavelength	I _F = 50 mA	865	880	895	nm
Δλ	Spectral Halfwidth	I _F = 50 mA		50		nm
C _t	Terminal Capacitance	V _R = 0 V, f = 1 MHz		30		pF
t _r	Rise Time	I _F = 100 mA		0.6		µS
t _f	Fall Time	I _F = 100 mA		0.5		mS



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.