

FEATURES

- High output power
- High reliability
- Narrow emission angle

DESCRIPTION

The **PDI-E809** is a high power 880 nm GaAlAs emitter, packaged in a low cost T 1¼ plastic package.

APPLICATIONS

- Photoelectric switches
- Infrared sources
- Optical readers

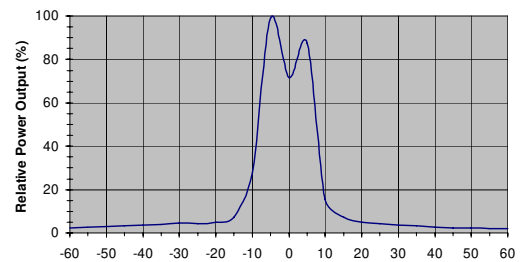


ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
P _d	Power Dissipation		200	mW
I _f	Continuous Forward Current		100	mA
I _p	Peak Forward Current		1	A
V _r	Reverse Voltage		5	V
T _{STG}	Storage Temperature	-25	+100	°C
T _O	Operating Temperature	-25	+100	°C
T _S	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 _o	Radiant Intensity	I _f = 50 mA	50	90		mW/Sr
V _f	Forward Voltage	I _f = 100 mA		1.6	2.0	V
V _r	Reverse Breakdown Voltage	I _f = 100 µA	5	30		V
λ _p	Peak Wavelength	I _f = 50 mA		880		nm
Δλ	Spectral Bandwidth @ 50% (FWHM)	I _f = 50 mA		70		nm
C _t	Terminal Capacitance	V _r = 0V, f = 1MHz		20		pF
t _r	Rise Time	I _f = 20 mA		1.5		µS
t _f	Fall Time	I _f = 20 mA		0.8		µS

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