



DESCRIPTION

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

FEATURES

- High output power
- High reliability
- Medium emission angle

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Photoelectric switches
- Optical readers
- Infrared sources



ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	(TA)= 23°C UNLESS OTHERWISE NOTED
Power Dissipation	-	-	360	mW	-
Continuous Forward Current	-	-	180	mA	-
Peak Forward Current	-	-	3.0	A	-
Reverser Voltage	-	-	3	V	-
Storage Temperature	-55	to	+125	°C	-
Operating Temperature	-55	to	+125	°C	-
Soldering Temperature	-	-	+240	°C	-

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

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.

OPTO-ELECTRICAL PARAMETERS

$T_a = 23^{\circ}\text{C}$ UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Output Power	$I_f = 100 \text{ mA}$	7.0	15	-	mW
Forward Voltage	$I_f = 100 \text{ mA}$	-	1.5	1.9	V
Reverse Current	$V_R = -3\text{V}$	-	-	10	μA
Peak Wavelength	$I_f = 50 \text{ mA}$	865	880	895	nm
Spectral Halfwidth	$I_f = 50 \text{ mA}$	-	80	-	nm
Dynamic Resistance	$I_f = 100 \text{ mA}$	-	1.2	-	Ohms
Rise Time	$I_f = 20 \text{ mA}$	-	0.6	-	μs
Fall Time	$I_f = 20 \text{ mA}$	-	0.5	-	μs