



FEATURES

- SOT-23 package
- Surface Mount
- Wide emission Angle

DESCRIPTION

The **PDI-E940** is a high power 940 nm and high power GaAs emitter, packaged in a small low cost SOT-23 surface mount package

APPLICATIONS

- Fiber optic sources
- Optical encoders
- Point light sources

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
P _d	Power Dissipation		170	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.

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _o	Output Power	I _f = 50 mA	18	22		mW
V _f	Forward Voltage	I _f = 20 mA		1.5	1.9	V
V _r	Reverse Breakdown Voltage	I _f = 10 μA	5	30		V
λ _p	Peak Wavelength	I _f = 100 mA	920	940	960	nm
Δλ	Spectral Halfwidth	I _f = 100 mA		50		nm
C _t	Terminal Capacitance	V _r = 0V, f = 1MHz		25		pF
t _r	Rise Time	I _f = 100 mA		80		nS
t _f	Fall Time	I _f = 100 mA		180		nS

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