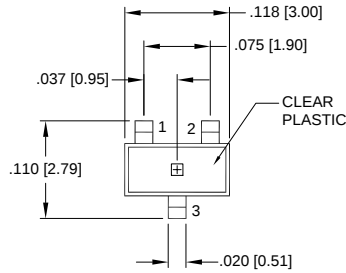
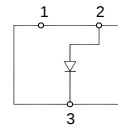
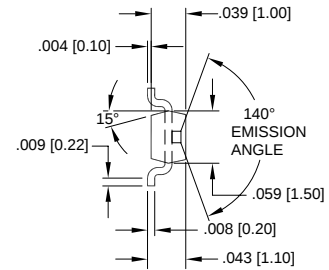
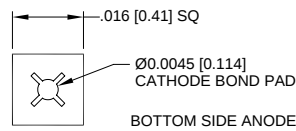




PACKAGE DIMENSIONS INCH [mm]



CHIP DIMENSIONS INCH [mm]



SOT-23 PACKAGE

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	$I_f = 10$ μ A	5	30		V
λ_p	Peak Wavelength	$I_f = 100$ mA	920	940	960	nm
$\Delta\lambda$	Spectral Halfwidth	$I_f = 100$ mA		50		nm
C_t	Terminal Capacitance	$V_r = 0$ V, $f = 1$ MHz		25		pF
t_r	Rise Time	$I_f = 100$ mA		80		nS
t_f	Fall Time	$I_f = 100$ mA		180		nS

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.