

### FEATURES

- Low Cost
- 660 nm +/- 3nm
- 2 drive line

### DESCRIPTION

The **PDI-E833** is a two drive line dual emitter oximeter component. The 660 and 940nm GaAlAs infrared emitters are mounted in a glob topped low cost ceramic SMT package. The LEDs are bias separately by alternating polarity on the bias pins.

### APPLICATIONS

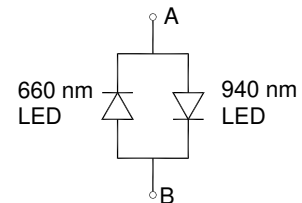
- Oximeter Probes
- Finger Clamps
- Reusable probes

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
P <sub>d</sub>	Power Dissipation		250	mW
I <sub>f</sub>	Continuous Forward Current		30	mA
I <sub>p</sub>	Peak Forward Current		200	mA
V <sub>r</sub>	Reverse Voltage		4	V
T <sub>STG</sub>	Storage Temperature	-40	+80	°C
T <sub>O</sub>	Operating Temperature	-40	+80	°C
T <sub>S</sub>	Soldering Temperature*		+240	°C

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

### SCHEMATIC



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	660 nm			940 nm			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	
P <sub>o</sub>	Radiant Flux	I <sub>f</sub> = 20 mA	1.8	2.4		1.2	1.8		mW
I <sub>v</sub>	Luminous Intensity	I <sub>f</sub> = 20 mA	20	30					mcd
V <sub>f</sub>	Forward Voltage	I <sub>f</sub> = 20 mA		1.8	2.4		1.3	1.5	V
V <sub>r</sub>	Reverse Breakdown Voltage	I <sub>f</sub> = 10 μA	5			5			V
λ <sub>p</sub>	Peak Wavelength	I <sub>f</sub> = 20 mA	658	661	664	930	940	950	nm
Δλ	Spectral Halfwidth	I <sub>f</sub> = 20 mA		25			50		nm
t <sub>r</sub>	Rise Time	I <sub>f</sub> = 20 mA		0.8			0.8		uS
t <sub>f</sub>	Fall Time	I <sub>f</sub> = 20 mA		0.8			0.8		uS

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.