# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



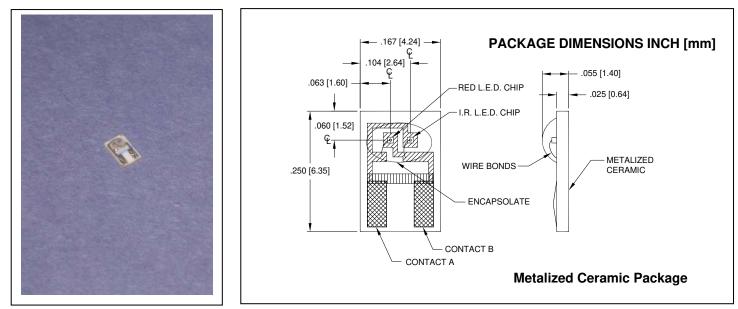
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### GaAIAs High power IR LED Emitters (660nm/880nm) PDI-E838



### • Low Cost

2 drive line

660 nm +/- 3nm

**DESCRIPTION** 

The **PDI-E838** is a two drive line dual emitter oximeter component. The 660 and 880 nm GaAlAs infrared emitters are mounted in a glob toped low cost ceramic SMT package. The LEDs are bias separately by alternating polarity on the bias pins.

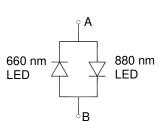
#### **APPLICATIONS**

- Oximeter Probes
- Finger Clamps
- Reusable probes

SCHEMATIC

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
P <sub>d</sub>	Power Dissipation		250	mW
l <sub>f</sub>	Continuous Forward Current		30	mA
I <sub>p</sub>	Peak Forward Current		200	mA
Vr	Reverse Voltage		4	V
T <sub>STG</sub>	Storage Temperature	-40	+80	°C
To	Operating Temperature	-40	+80	°C
Ts	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	660 nm			880 nm			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	UNITS
Po	Radiant Flux	I <sub>f</sub> = 20 mA	1.8	2.4		1.2	1.8		mW
lv	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		1.2	1.7	V
Vr	Reverse Breakdown Voltage	I <sub>f</sub> = 10 μA	5			5			V
$\lambda_{p}$	Peak Wavelength	l <sub>f</sub> = 20 mA	658	661	664	870	880	890	nm
$\Delta\lambda$	Spectral Halfwidth	l <sub>f</sub> = 20 mA		21			50		nm
t <sub>r</sub>	Rise Time	l <sub>f</sub> = 20 mA		0.1			0.8		uS
t <sub>f</sub>	Fall Time	l <sub>f</sub> = 20 mA		0.04			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.