

FEATURES

- High speed
- High reliability
- Point source emission

DESCRIPTION

The PDI-E825 is a high power 850 nm GaAlAs point source infrared emitter packaged in a TO-46 metal header with a clear plastic lens cap.

APPLICATIONS

- Fiber optic source
- Infrared sources
- Optical readers

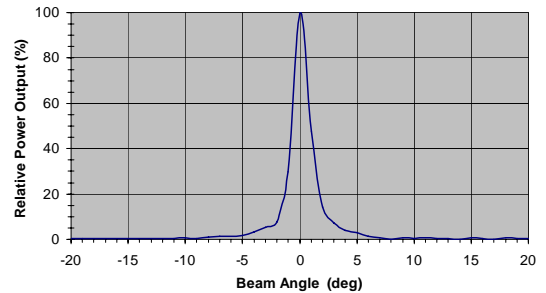


ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
P _d	Power Dissipation		200	mW
I _f	Continuous Forward Current		100	mA
I _p	Peak Forward Current		2.5	A
V _r	Reverse Voltage		2	V
T _{STG}	Storage Temperature	-55	+125	°C
T _O	Operating Temperature	-55	+125	°C
T _S	Soldering Temperature*		+240	°C

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

RADIATION PATTERN



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _o	Output Power	I _f = 100 mA	2.2	2.7		mW
V _f	Forward Voltage	I _f = 100 mA		1.7	2.2	V
V _r	Reverse Breakdown Voltage	I _f = 10 μA	2.0			V
λ _p	Peak Wavelength	I _f = 20 mA	830	850	870	nm
Δλ	Spectral Bandwidth @ 50% (FWHM)	I _f = 20 mA		35		nm
C _t	Terminal Capacitance	V _r = 0V, f = 1MHz		68		pF
t _r	Rise Time	I _f = 20 mA		15		nS
t _f	Fall Time	I _f = 20 mA		15		nS

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