AFONICS

LE-0002

- High power 1320nm LED
- Ideal for local area networks

Performance Highlights

- Minimum 50µW into 62.5/125µm fibre at I_F=100mA
- Peak wavelength at 1320nm
- Bandwidth of 125MHz

LIMITING VALUES	SYMBOL	VALUE	UNITS
Continuous forward current	I_F	150	mA
Reverse voltage	V_{RL}	2.0	V
Operating temperature	T_{amb}	-40 to +85	°C
Storage temperature	T_{stg}	-40 to +125	°C
Soldering temperature 2mm from case for 10s	T_{sld}	260	°C

THERMAL CHARACTERISTICS	SYMBOL	VALUE	UNITS
Optical power temperature coefficient	dP/dT_j	-0.03 (typ)	dB/ºC
Wavelength temperature coefficient	$d\lambda/dT_j$	0.38 (typ)	nm/ºC

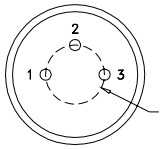
OPTICAL/ELECTRICAL CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITION
Power (50/125µm NA 0.20) (62.5/125µm NA 0.27)	P_F	25 50	35 75		µW	I_F = 100mA DC
Peak emission wavelength	λ_P	1290	1320	1350	nm	I_F = 100 mA
Spectral bandwidth (FWHM)	$\Delta\lambda$			170	nm	I_F = 100 mA
Rise / fall time (10% to 90%)	t_{Lr} / t_{Lf}		2.5	4	ns	I_F = 100 mA
Bandwidth	f_C		125		MHz	I_F = 100 mA
Forward voltage	V_F		1.4	1.7	V	I_F = 100 mA
Capacitance	C		15		pF	V_R = 0V, f = 1MHz
Reverse current	I_R			2	µA	V_R = 2V

All values apply at a temperature of 25°C

EMITTER PINOUT DETAILS

1 = Anode
2 = Cathode
3 = Case

Pin Length = 12.7mm



2.54 mm PCD

REAR VIEW

EMITTER INTERNAL CIRCUIT

NOTES: The device is very susceptible to damage by electrostatic discharge.

WARNING - Radiation emitted by LED devices can be dangerous to the eyes and appropriate precautions must be taken in use.

(Ref BS EN 60825, HD 482 S1 & IEC 825)

INVISIBLE OPTICAL RADIATION

NOTES:

1) Standard pin orientation aligns pin 2 with the receptacle keyway unless a custom orientation is requested.
2) The heatsink tab is removed to allow alignment in some receptacles.
3) Usable pin length will vary dependant on choice of receptacle. If pin length is important please contact Afonics before placing an order.

