AFONICS

RX-0008

- Si PIN Diode
- 350MHz bandwidth

Performance Highlights

- Responsivity typically 0.35A/W
- Maximum dark current 1.5nA
- Operating temperature -55°C to +125°C

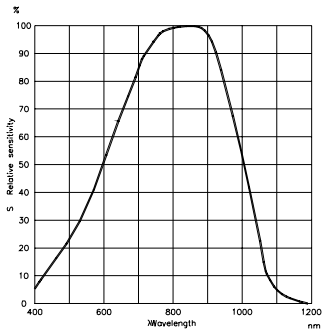
LIMITING VALUES	SYMBOL	VALUE	UNITS
Continuous reverse voltage	V_R	50	V
Operating temperature	T_{amb}	-55 to +125	°C
Storage temperature	T_{stg}	-65 to +150	°C
Soldering temperature 2mm from case for 13	T_{sld}	260	°C

OPTICAL/ELECTRICAL CHARACTERISTICS	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITION
Responsivity (50µm core fibre)	R	0.30	0.35		A/W	λ = 850nm, V_R = 5V
Rise and fall time (10% - 90%)	t_r, t_f			1.5	ns	V_R = 5V, R_L=50Ω, λ=880nm, I_P=7µA
Bandwidth	f_c		350		MHz	V_R = 5V
Operating voltage	V_F		1.3		V	I_F = 80mA
Capacitance	C_T			2	pF	V_R = 5V, f =1MHz
Dark current	I_D			1.5	nA	V_R = 30V

All values apply at a temperature of 25°C

Note: The stated operating temperature range applies to the device only. This range may change for the receptacled part, due to the methods of assembly particular to each part.

GRAPHS SHOWING TYPICAL CHARACTERISTICS



Relative sensitivity
vs wavelength

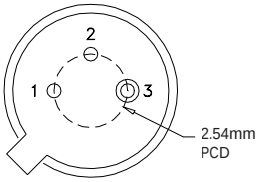
PINOUT DETAILS

1 = Anode

2 = Cathode

3 = Case

Pin length = 12mm



REAR VIEW

INTERNAL CIRCUIT

NOTES:

1) The device is very susceptible to damage by electrostatic discharge.

