



Model No. PDT-A85P5-4GA3

4.25Gbps 850nm GaAs PIN plus AGC Pre-amplifier Photodiode in TO-46 Package

FEATURES

- 850nm GaAs PIN TIA 5 pin TO
- Industry standard TO-46 package with cap lens and tab-less
- Optimized for fiber optic application
- Design for short wavelength 4.25Gbps applications
- Photocurrent monitoring available
- Single power supply from +3.3V



ELECTRO-OPTICAL CHARACTERISTICS (T_A = 25°C)

PARAMETERS	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
POWER SUPPLY	V _{CC}	3.0	3.3	3.6	V	
SUPPLY CURRENT	I _{CC}	30	34	42	mA	No loads
DIFFERENTIAL RESPONSIVITY	R _d		1.2		mV/uW	λ = 850nm, R _{load} =100ohm, P= -15dBm
SINGLE ENDED RESPONSIVITY	R _s		0.6		mV/uW	λ = 850nm, R _{load} =50ohm, P = -15dBm
SMALL-SIGNAL BANDWIDTH	BW		2.5		GHz	λ = 850nm, P = -15dBm
LOW-FREQUENCY CUT OFF	LF		15		kHz	
RISE/FALL TIME (20-80%)	tr/tf		135		ps	λ = 850nm, P = -15dBm
SATURATION POWER	P _{sat}	0			dBm	
SINGLE ENDED OUTPUT IMPEDANCE	R _O		50		ohm	
WAVELENGTH	λ	770		860	nm	
SENSITIVITY				-21	dBm	λ = 850nm, @4.25Gbps, PRBS7, ER=7dB, BER=10 ⁻¹⁰

ABSOLUTE MAXIMUM RATINGS

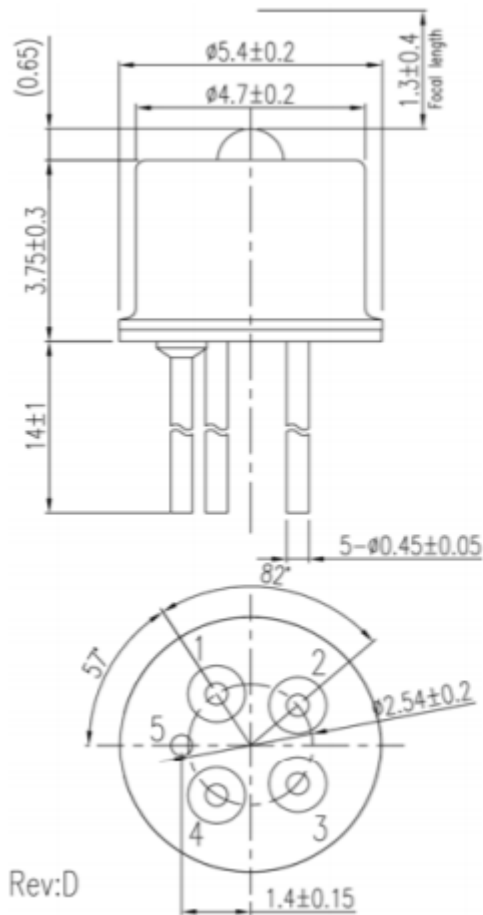
PARAMETERS	MIN.	MAX.	UNIT	CONDITIONS
STORAGE TEMPERATURE	-40	100	°C	
OPERATING TEMPERATURE	-40	85	°C	
LEAD SOLDER TEMPERATURE		260	°C	10 seconds

Note: The above specifications are subject to change without notice.





OUTLINE DIMENSIONS (unit: mm)



Pinout:

Pin no.	Function
1	Dout(+)
2	Vcc
3	Isource
4	Dout(-)
5	Gnd

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