

3.125 Gbps 850 nm PIN Data Sheet

Part Number: PG2A-7000

Applications: 2.5/ 3.125 Gbps

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Value
Forward Current	I _F	mA	10
Reverse Voltage	V _R	V	40
Reverse Current	I _R	mA	1
Operating Temperature	T _{op}	°C	0 - 90
Storage Temperature	T _{stg}	°C	-40 - 100

Electro-optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Aperture	D	μm		75		
Responsivity	R	A/W	0.58	0.62		V _R = 5 V λ = 850 nm
Dark Current	I _D	NA		0.1	1.0	V _R = 5 V
Breakdown Voltage	V _B	V	50			I _R = 1 μA
Capacitance	C	pF		0.5	0.6	V _R = 2 V f = 1 MHz
Peak Wavelength	λ	nm	830	850	860	
Rise/Fall Time	τ _r /τ _f	ps		80/80	90/90	V _R = 2 V 20-80%
Cut-off Frequency	f _C	GHz	3.0	4.4		V _R = 2 V R _L = 50 Ω

Chip configuration:

1. Both anode and cathode contacts on top (epi) surface.
2. Die size (typical): 250 μm (Wide) x 400 μm (Long) x 165 μm (Thick)
3. Bond pad size: 80 x 80 μm square