

1310/1550 nm Power-Monitor PIN

DI0A-7018

Part Number: DI0A-7018

Applications: Optical power monitoring of laser diodes (VCSEL, FP or DFB)

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Value
Forward Current	I _F	mA	10
Reverse Voltage	V _R	V	15
Reverse Current	I _R	mA	1
Die-Attach Temperature		°C	330, 60 seconds max
Operating Temperature	T _{op}	°C	-40 to 90
Storage Temperature	T _{stg}	°C	-40 to +100



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

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Aperture	L	μm	180	182	184	
Responsivity	R	A/W	0.5	0.90		V _R = 1.2 to 5V, λ = 1270-1620 nm
Dark Current	I _D	nA		0.1	2.0	V _R = 5 V at 25°C
Dark Current	I _D	nA		5	30	V _R = 5 V, 90°C
Breakdown Voltage	V _B	V	20	35		I _R = 10 μA at 25°C
Capacitance	C	pF		3	10	V _R = 5 V f = 1 MHz at 25°C

Chip configuration:

1. Top contact: Anode; Bottom contact: Cathode
2. Anode bond-pad diameter: 70μm
3. Dimension: 300μm (width) x 300 μm (length), Tolerance: +/-20μm
130 μm (thickness), Tolerance: +/-10μm