

## 1310/1550 nm Power-Monitor PIN

### DI0A-7030

**Part Number: DI0A-7030**

**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	20
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	D	μm	298	300	302	
Responsivity	R	A/W	0.85 0.90	0.90 0.95		$\lambda = 1310 \text{ nm}$ $\lambda = 1550 \text{ nm}$
Dark Current	$I_D$	nA		0.2	1.0	$V_R = 5 \text{ V}$
Breakdown Voltage	$V_B$	V	20			$I_R = 1 \text{ μA}$
Capacitance	C	pF		5	8	$V_R = 5 \text{ V}$ $f = 1 \text{ MHz}$
Rise/Fall Time	$\tau_r/\tau_f$	ns			1.0	$V_R = 2 \text{ V}$ 20-80%, $R_L = 50\Omega$
Cut-off Frequency	$f_C$	MHz	300			$V_R = 2 \text{ V}$ $R_L = 50\Omega$

**Chip configuration:**

1. Top contact: Anode; Bottom contact: Cathode
2. Anode bond-pad diameter: 100um
3. Dimension: 500um (width) x 500 um (length) x 130 um (thickness)  
Tolerance: +/-12.5um

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