

1310/1550 nm Power-Monitor PIN

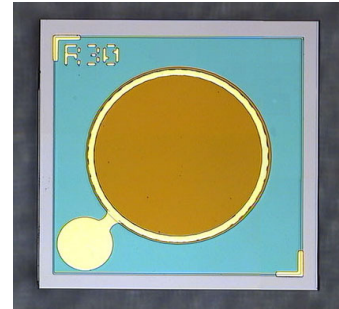
DI0A-7031

Part Number: DI0A-7031

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



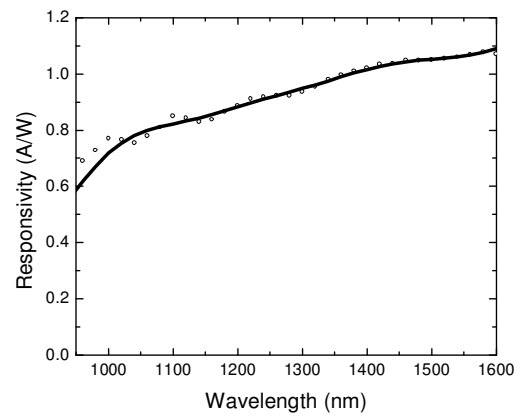
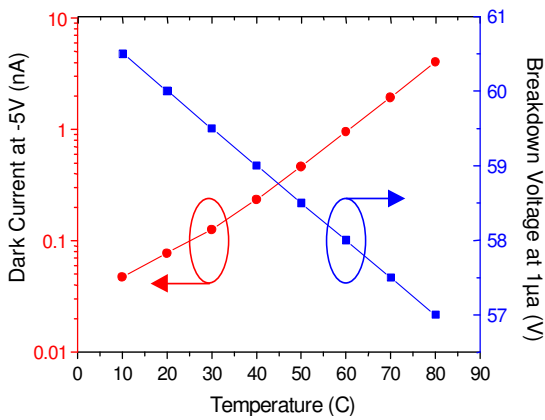
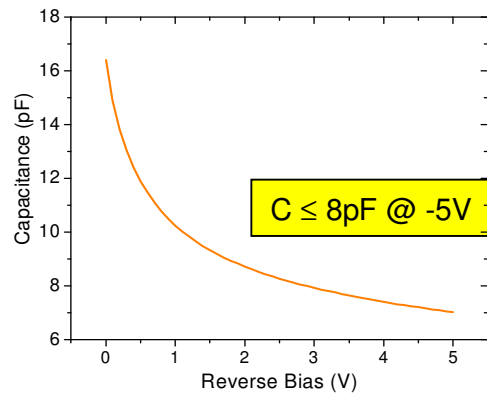
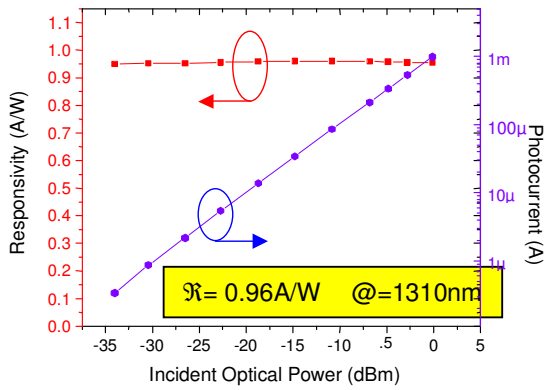
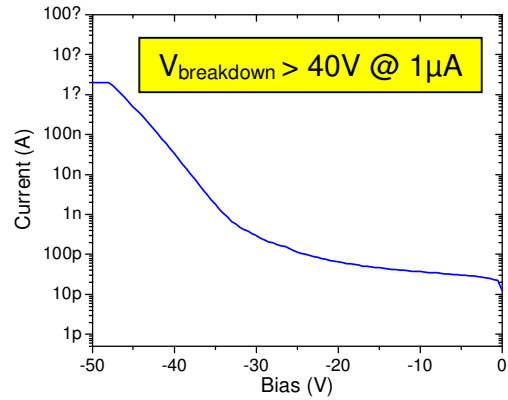
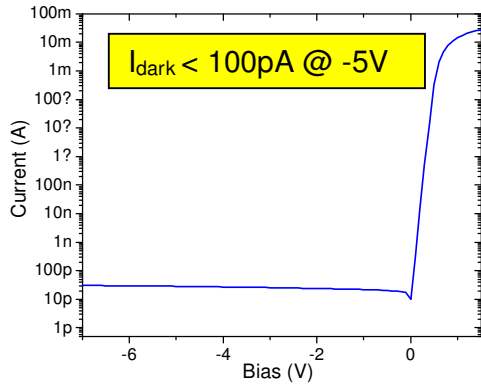
Electro-optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Aperture	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	τ_r/τ_f	ns			1.0	$V_R = 5 \text{ V}$ 20-80%, $R_L = 50\Omega$
Cut-off Frequency	f_c	MHz	300			$V_R = 5 \text{ V}$ $R_L = 50\Omega$

Chip configuration:

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

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* Specifications are subject to change without notice.
 * Screening per customer-specified reject limits is available.