

155/622 Mbps 1310nm PIN

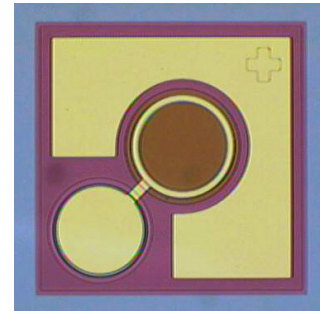
DI7D-7080

Part Number: DI7D-7080

Applications: 155, 622 Mbps (OC-3, OC-12)

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Value	Note
Forward Current	I_F	mA	10	
Reverse Voltage	V_R	V	20	
Die-Attach Temperature		°C	330	60 Seconds Max
Operating Temperature	T_{op}	°C	0 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	78	80	82	
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		0.15	1.0	$V_R = 5 \text{ V}$
Breakdown Voltage	V_B	V	20			$I_R = 1 \mu\text{A}$
Capacitance	C	pF		1.1	1.3	$V_R = 2 \text{ V}$ $f = 1 \text{ MHz}$
Rise/Fall Time	τ_r/τ_f	ps		145	170	$V_R = 2 \text{ V}$ 20-80%, $R_L = 50\Omega$
Cut-off Frequency	f_c	GHz	1.85			$V_R = 2 \text{ V}$ $R_L = 50\Omega$

Chip configuration:

1. Top contact: Anode; Bottom contact: Cathode.
2. Anode bond-pad diameter: 80 μm
3. Die size: 300 μm (width) x 300 μm (length) x 130 μm (thickness)
Tolerance: +/-12.5 μm

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