

1x4 10 Gbps 1310/1550 nm PIN Array

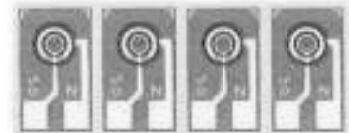
MI5B-7450

Part Number: MI5B-7450

Applications: 10 Gbps

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	-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	48	50	52	
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		20	50	$V_R = 5 \text{ V}$
Breakdown Voltage	V_B	V	20			$I_R = 1 \text{ } \mu\text{A}$
Capacitance	C	pF		0.16	0.22	$V_R = 5 \text{ V}$ $f = 1 \text{ MHz}$
Rise/Fall Time	τ_r/τ_f	ps			30	$V_R = 2 \text{ V}$ 20-80%, $R_L = 50\Omega$
Cut-off Frequency	f_c	GHz	9			$V_R = 2 \text{ V}$ $R_L = 50\Omega$

Chip configuration:

- Both anode and cathode contacts on top (epi) surface.
- Dimension: 1000 μm (width) x 400 μm (length) x 130 μm (thickness)
Tolerance: +/-12.5μm
Per channel dimension: 250 μm (width) x 400 μm (length)
- Bond pad size: 70 x 80 μm square
- P-bond pad on left

*Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

Version 1.0