

## 1x4 25 Gbps 1310/1550 nm PIN Array (Preliminary)

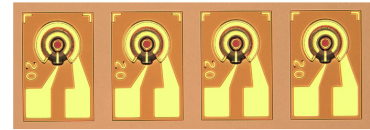
### MI7G-7420

**Part Number: MI7G-7420**

**Applications: 100 Gbps**

**Absolute Maximum Ratings (T = 25°C):**

Parameter	Symbol	Unit	Value	Note
Forward Current	I <sub>F</sub>	mA	10	
Reverse Voltage	V <sub>R</sub>	V	20	
Die-Attach Temperature		°C	330	60 Seconds Max
Operating Temperature	T <sub>op</sub>	°C	-40 to 90	
Storage Temperature	T <sub>stg</sub>	°C	-40 to +100	



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

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Aperture	D	μm	18	20	22	
Responsivity	R	A/W		0.75		λ = 1310 nm
Dark Current	I <sub>D</sub>	nA		10	50	V <sub>R</sub> = 5 V
Breakdown Voltage	V <sub>B</sub>	V	20			I <sub>R</sub> = 1 μA
Capacitance	C	pF		0.08	0.10	V <sub>R</sub> = 5 V f = 1 MHz
Cut-off Frequency	f <sub>C</sub>	GHz		22		V <sub>R</sub> = 2 V R <sub>L</sub> = 50Ω

Chip configuration:

1. Both anode and cathode contacts on top (epi) surface.
2. Dimension: 350 μm (width) x 1000 μm (length) x 130 μm (thickness)  
Tolerance: +/-12.5μm  
Per channel dimension: 250 μm (width) x 350 μm (length), die pitch is 250μm.
3. Bond pad size: 70 x 80 μm square
4. P-bond pad on left