

# GCS GaAs PIN Photodiodes for 10Gb/s 1x4, 1x8, 1x12 Array Applications



## 850 nm GaAs PIN PD

- Mesa Diode on Semi-Insulating Substrates
- Anode/Cathode Bonding Pads on Front Side
- Low Dark Current & Capacitance with High Responsivity
- Bandwidths up to 10 GHz
- Customer Specified Configurations Available

Part Number: Do173-60um-PIN4-1x4,8,12	
PHYSICAL	Typical
Aperture Dia.	60 $\mu\text{m}$
Bonding Pad Dia.	75 $\mu\text{m}$ x 90 $\mu\text{m}$
Die Height	150 $\mu\text{m}$
Die Size	(1-3 mm) X 400 $\mu\text{m}$
Substrate	Semi-Insulating

## Applications

- 850nm 10G 1x4, 1x8, 1x12
- Infiniband
- SONET/SDH
- Unsealed 85 R.H./85C Qualified



## Key Benefits

- Low-Cost 4-inch Manufacturing
- Fast Cycle-Times
- CAD Support & Mask Procurement
- Robust Process

Mask ID: Do173 (60 $\mu\text{m}$ )						
CHARACTERISTICS	Conditions	Min.	Typical	Max	Unit	Notes
Bandwidth	-3V	-	10	-	GHz	
Wavelength Range	-3V	760	850	860	nm	
Responsivity	-3V	0.5	0.6	-	A/W	@ 850nm
Dark Current	-3V	-	0.1	0.5	nA	
Reverse Breakdown	-20V	-	-	1	$\mu\text{A}$	
Capacitance	-3V	-	0.20	0.23	pF	

Global Communication Semiconductors, Inc  
23155 Kashiwa Court, Torrance, CA 90505  
Tel: (310) 530-7274 Fax: (310) 517-8200 e-mail: info@gcsincorp.com

[www.gcsincorp.com](http://www.gcsincorp.com)

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