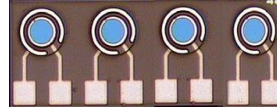


Features

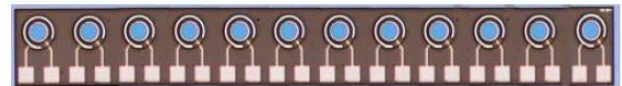
- : Two top-side wire bond pads per channel
- : 1x4, 1x12 chips
- : AR coated for 850 nm
- : Low dark current and low capacitance
- : Uniform characteristics
- : Data rate 2.5 / 3.125Gbps per Channel
- : Other configurations available on request

Description

AP85-2M104



AP85-2M112



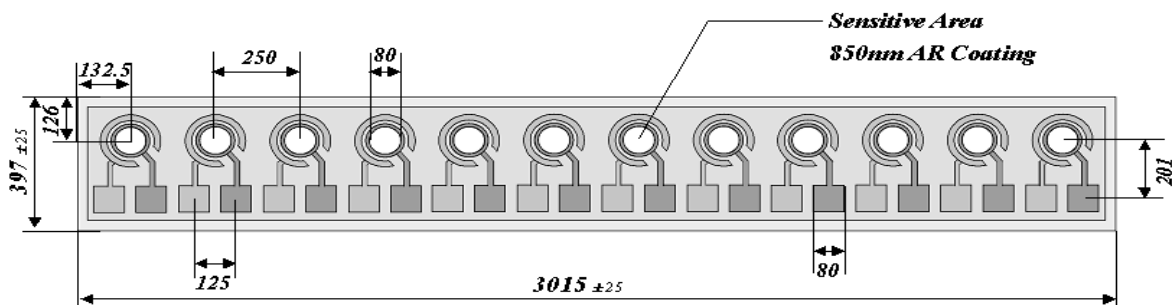
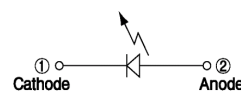
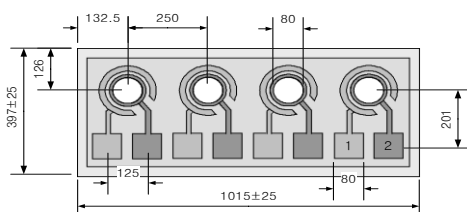
Applications

- : High speed Data Communications
- : Gigabit Ethernet
- : Fiber Channel

Absolute Maximum Ratings

Parameter	Rating
Forward Current	10mA
Reverse Voltage	40V
Operating Temperature	0 to 85 °C
Storage Temperature	-40 to 100 °C

Dimensions



Unit : μm

Die Height : $200 \pm 15 \mu\text{m}$

**Electro-Optics Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise stated)**

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Sensitive Area	D		80		μm	In diameter
Responsivity	R	0.5	0.6		A/W	$V_R = 1.6\text{ V}$, $\lambda = 850\text{ nm}$
Dark Current	I_D		0.1	1.0	nA	$V_R = 1.6\text{ V}$
Breakdown Voltage	V_B	40			V	$I_r = 1\mu\text{A}$
Capacitance	C		0.4	0.5	pF	$V_R = 1.6\text{ V}$, $f = 1\text{ MHz}$
Peak Wavelength	λ		850		nm	
Rise and Fall times	t_r/t_f		100/100		ps	$V_R = 1.6\text{ V}$. 20% ~ 80%
Bandwidth	$f_{-3\text{dB}}$		5.0		GHz	$V_R = 1.6\text{ V}$

Notes

1. Substrate : Semi-insulating GaAs
2. Specific active area, pad size and shapes can be provided on customer's request.

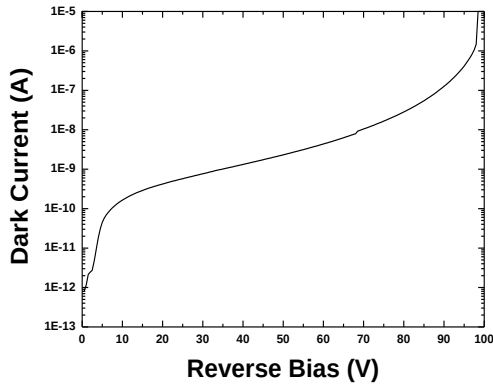
* These specifications are subject to change without notice.

NOTICE

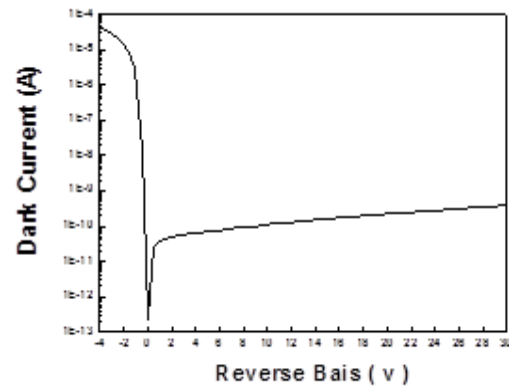
The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

Characteristics Curves

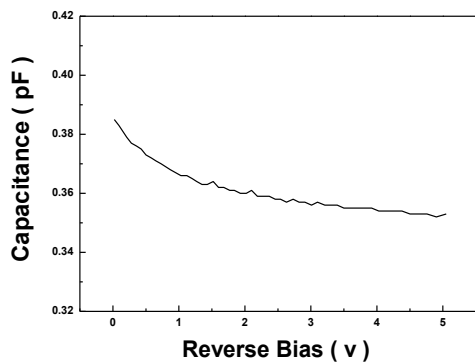
I-V Curve



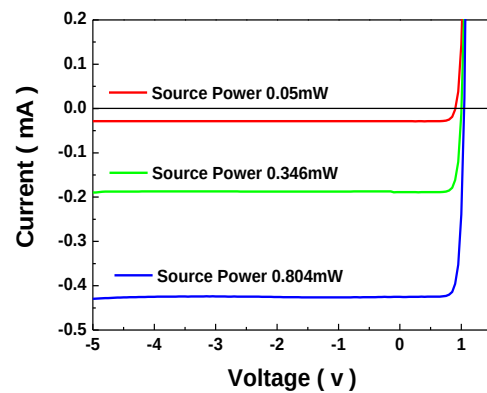
Dark Current



C-V Curve



Responsivity



λ Vs Responsivity

