840nm **4D470** PIN Array

Parallel Datacom, Telecom



This device consists of a 4-channel PIN Photodiode array in a miniature surface-mountable MT package. It is based on a unique combination of self-alignment technology and direct optical coupling to fiber, resulting in optimum coupling efficiency without need for active alignment. Applications include parallel Fibre Channel and optical interconnect inter/intra-board. And it matches the 4D469 VCSEL Array.

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CATHODE CATHODE CATHODE CATHODE CATHODE CATHODE ANODES FRONT VIEW					
9.35 — HETAL SHIELD	ε				
HEAT SINK MT GUIDE PINS 3.25	All dimensions in mm				
LEADS 0.85 0.75	All dimen:				
SIDE VIEW					
The cathode is connected to the metal shield					

PIN Array in MT Package

Optical and Electrical Characteristics (25°C Case Temperature)							
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION	
Responsivity	R		0.45		A/W	λ=850nm	
Bandwidth (3dB _{el})	$f_{\mathbf{c}}$		2		GHz	$R_{\rm L}$ =50 Ω	
Capacitance	С		1		pF	f=1MHz	
Dark Current	$I_{\rm d}$		0.4		nA		
Crosstalk	X		-30		dB _{el}	λ=850nm (Note 1)	

Test Condition: V_R =3.3V or 5V. Fiber Ribbon: 50/125 GI, NA=0.2 or 62.5/125 GI, NA=0.275. **Note 1:** Crosstalk between adjacent channels operating at 2GHz.

Absolute Maximum Ratings				
PARAMETER	SYMBOL	LIMIT		
Storage Temperature	$T_{\rm stg}$	-40 to +85°C		
Operating Temperature	$T_{\rm op}$	0 to +70°C		
Reverse Voltage	$V_{\rm R}$	20V		
Soldering Temperature (2mm from the case for 10 sec)	T _{sld}	260°C		

Thermal Characteristics						
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	
Temperature Coefficient - Dark Current	dI_{d}/dT_{j}		5		%/°C	

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