

# PRODUCT INFORMATION

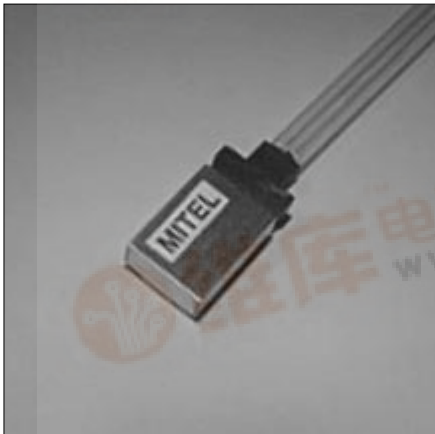
840nm

**4D470**  
PIN Array

Parallel Datacom, Telecom

PRELIMINARY/β

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.



## Optical and Electrical Characteristics (25°C Case Temperature)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Responsivity	$R$		0.45		A/W	$\lambda=850\text{nm}$
Bandwidth (3dB <sub>el</sub> )	$f_c$		2		GHz	$R_L=50\Omega$
Capacitance	$C$		1		pF	$f=1\text{MHz}$
Dark Current	$I_d$		0.4		nA	
Crosstalk	$X$		-30		dB <sub>el</sub>	$\lambda=850\text{nm}$ (Note 1)

Test Condition:  $V_R=3.3\text{V}$  or  $5\text{V}$ . Fiber Ribbon: 50/125 GI, NA=0.2 or 62.5/125 GI, NA=0.275.

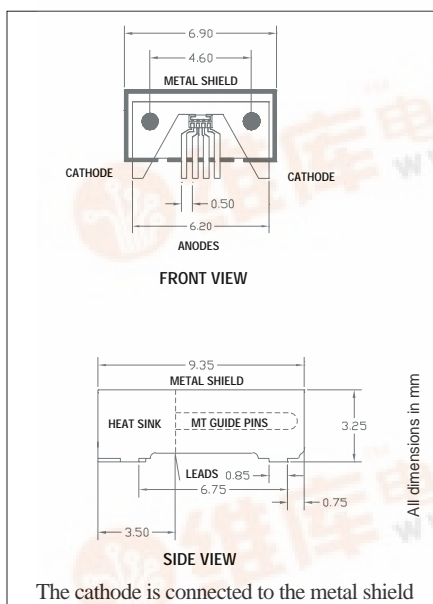
Note 1: Crosstalk between adjacent channels operating at 2GHz.

## Absolute Maximum Ratings

PARAMETER	SYMBOL	LIMIT
Storage Temperature	$T_{\text{stg}}$	-40 to +85°C
Operating Temperature	$T_{\text{op}}$	0 to +70°C
Reverse Voltage	$V_R$	20V
Soldering Temperature (2mm from the case for 10 sec)	$T_{\text{sld}}$	260°C

## Thermal Characteristics

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
Temperature Coefficient - Dark Current	$dI_d/dT_j$		5		%/°C



PIN Array in MT Package



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