

# PRODUCT INFORMATION

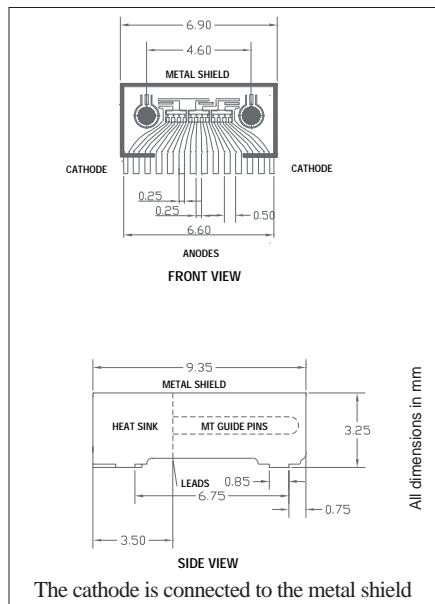
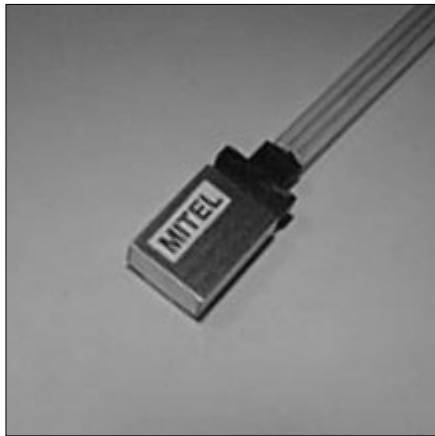
840nm

**12L486**  
PIN Array

Parallel Datacom, Telecom

ADVANCE/Q

This device consists of a 12-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 12L485 VCSEL Array.



**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              | $\lambda=850\text{nm}$          |
| 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:  $V_P=3.3\text{V}$  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                                  | $T_{stg}$ | -40 to +85°C |
| Operating Temperature                                | $T_{op}$  | 0 to +70°C   |
| Reverse Voltage                                      | $V_R$     | 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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Europe: Tel (46) 8 58 02 45 00 Fax (46) 8 58 02 01 10  
Tel (44) 1291 436180 Fax (44) 1291 436771

America: Tel 1-800-96MITEL Fax (613) 592-6909  
Asia: Tel (65) 293 5312 Fax (65) 293 8527