

PDT1412/1411

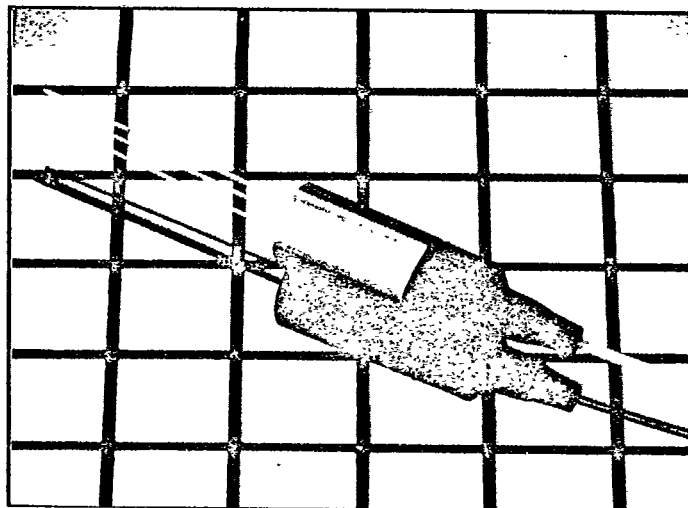
PIGTAILED PIN PHOTODIODE

Features

- Hermetic construction
- Low dark current
- High reliability planar InGaAs PIN photodiode
- High responsivity
- Multimode pigtail

Applications

- Instrumentation
- O-E convertors
- Single or multimode fiber communications systems
- Data communications receivers
- Fiber optic sensors



Description

The PDT141X photodiode is a high reliability InGaAs planar photodiode manufactured by the MOVPE process, assembled into a hermetic

lensed package and mounted in a housing fitted with 50/125 fiber.

T-44-53

PDT1412/1411



PACKAGE DIMENSIONS

dimensions in millimeters

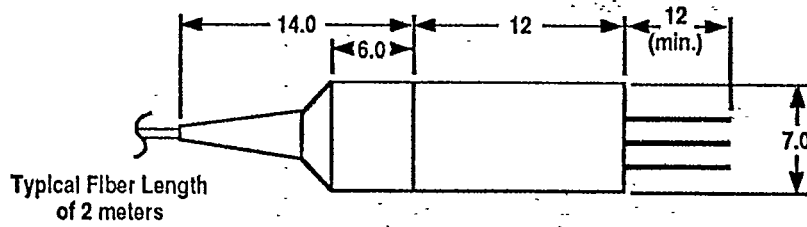
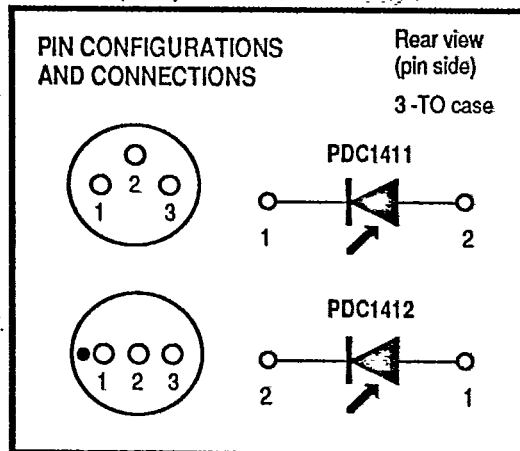
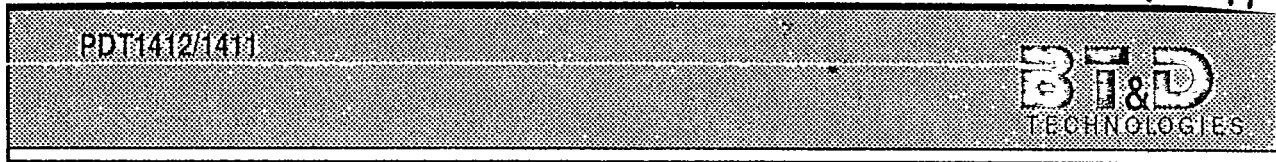


FIGURE 1



T-41-53



SPECIFICATIONS

CHARACTERISTICS (Tc 25°C)

PARAMETER		MIN	TYP	MAX	UNITS
Responsivity ¹	1550 nm	0.75	0.90	—	A/W
	1300 nm	0.65	0.75	—	A/W
Dark Current ²		—	0.1	5.0	nA
Packaged Diode Capacitance ³		—	1.0	2.0	pf
Rise Time ⁴		—	1.0	5.0	ns
Fall Time ⁵		—	1.0	5.0	ns
Operating Wavelength		1200	—	1600	nm

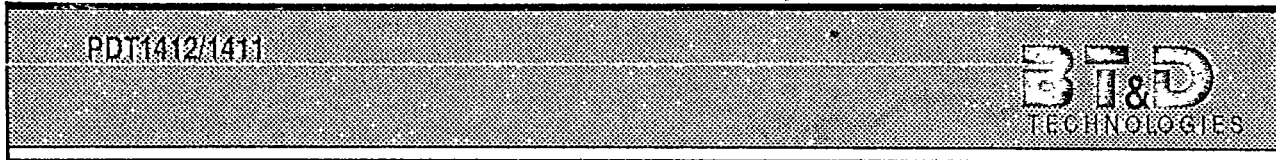
ABSOLUTE MAXIMUM RATINGS

PARAMETER	MIN	TYP	MAX	UNITS
Reverse Voltage	—	—	30	V
Forward Current	—	—	5	mA
Operating Temperature	-20	—	+80	°C
Storage Temperature	-25	—	+85	°C
Forward Voltage	—	—	1	V
Power Dissipation	—	—	50	mW
Reverse Current	—	—	1	mA
Axial Lead Pull (mechanical stress)	—	—	10	N

Notes:

- 1 50/125 fiber
- 2 -5V reverse bias
- 3 f = 1MHz
- 4 10-90% 50Ω
- 5 90-10% 50Ω
- 6 Do not apply non-axial loads which mechanically stress electrical leads

T-41-53



ORDERING INFORMATION

Please order part number **P D T 1 4 1 X**

1 = "Triangular pin configuration"
 2 = "In line" pin configuration
 (see Figure 1)

HANDLING PRECAUTIONS

Normal handling precautions for electrostatic-sensitive devices should be taken. Care should be taken to avoid power supply transients.

To place an order or to obtain more information, contact:

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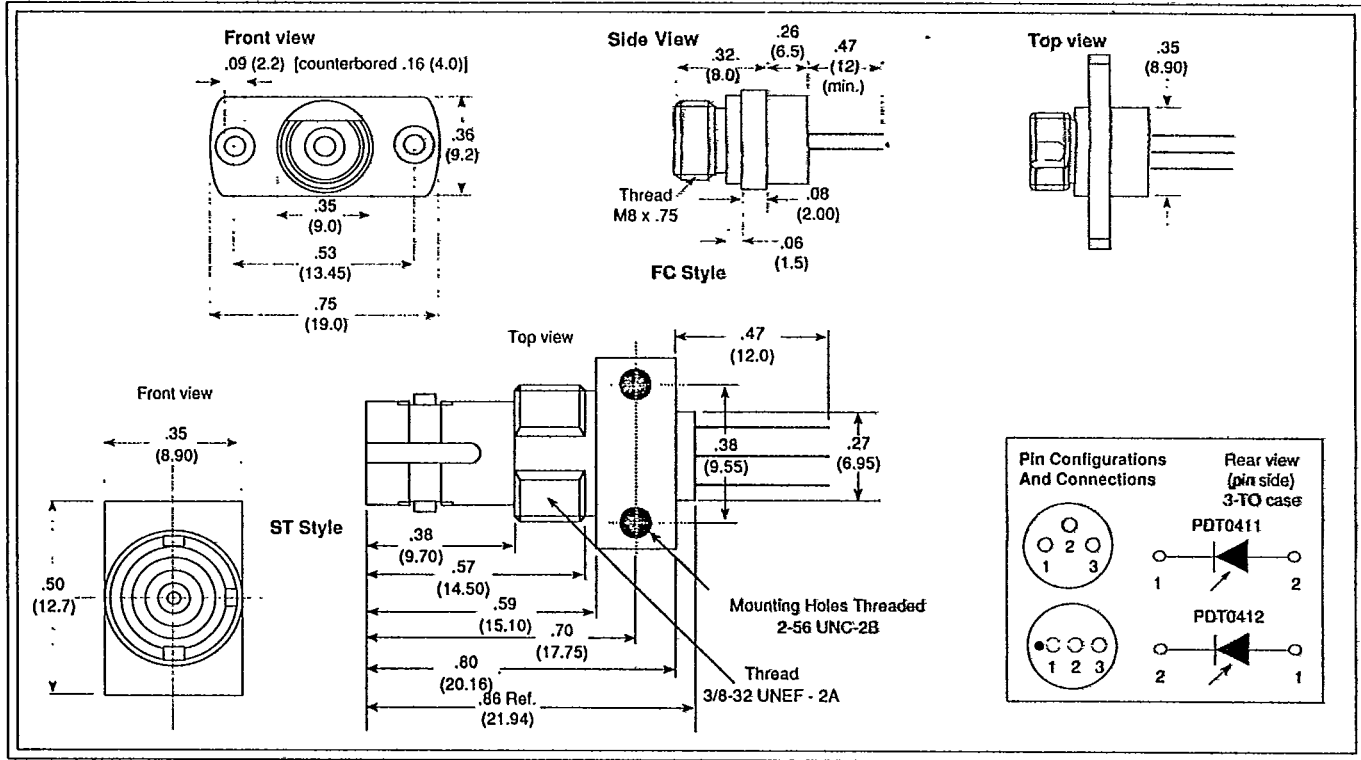
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Package Dimensions

BT&D
T-90-60

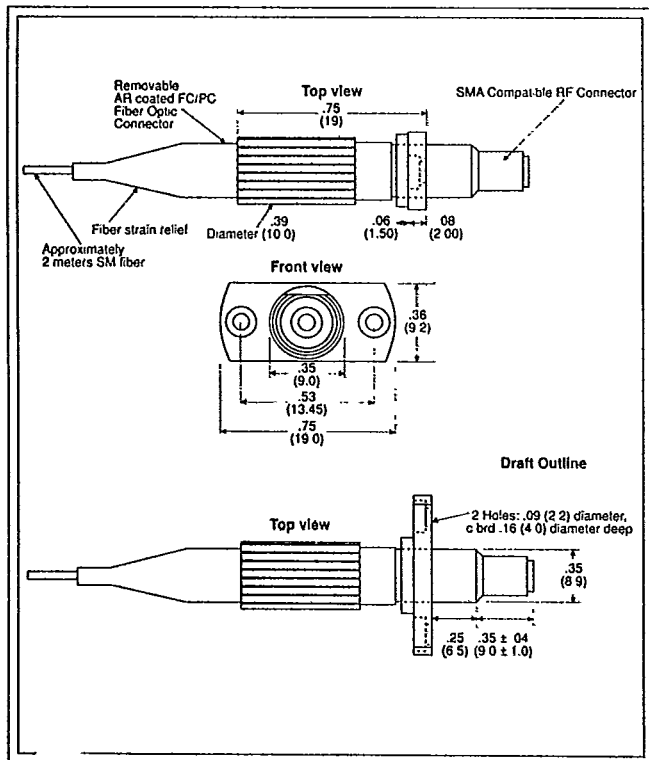
PDT0411/0412 PACKAGE DIMENSIONS

Dimensions in inches (millimeters)



PDC4310 PACKAGE DIMENSIONS

Dimensions in inches (millimeters)



PDT1411/1412 PACKAGE DIMENSIONS

Dimensions in inches (millimeters)

