

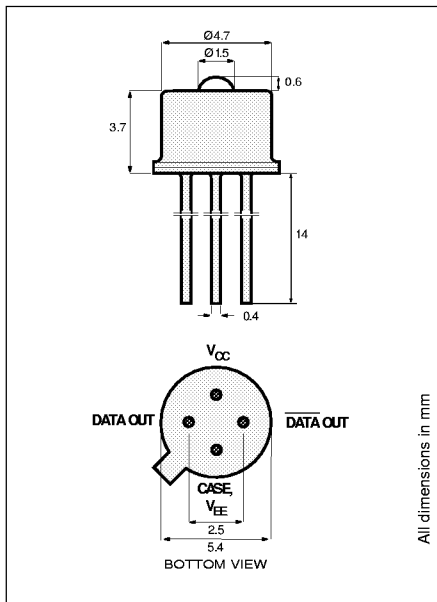
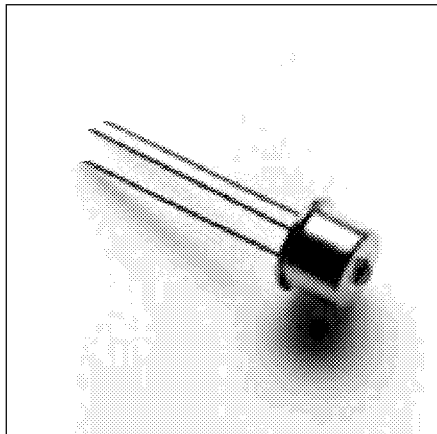
PRODUCT INFORMATION

1300nm
1550nm
8C483
PIN/Preamp

Datacom

PRELIMINARY/β

This device contains a PIN photodiode, a low noise GaAs transimpedance amplifier with differential limiting amplifier assembled in a TO-46 package. It is designed for Fibre Channel and Gigabit Ethernet. Its optical system is designed for single-mode fiber as well as for multimode fiber with core diameter up to 62.5µm.



TO-46 Package With Lens

Optical and Electrical Characteristics (25°C Case Temperature)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Responsivity, single differential	R		3.2 6.4		kV/W	$\lambda=1300$ nm $P < -23$ dBm
Output Voltage (single)	V_O	100	115	130	mV	$R_{LOAD} 50 \Omega$ (AC) $P > -16$ dBm
Bandwidth (3dB _{cl})	f_C	0.9	1.2		GHz	
Noise-Equivalent Power	NEP		350		nW	$\lambda=1300$ nm
Sensitivity (BER 10 ⁻⁹)	S		-26		dBm	$\lambda=1300$ nm Extinction Ratio=0
Dynamic Range			24		dB	
Output Resistance (single)	R_O	40	50	60	Ω	
Power Supply Current	I_{DD}		24	35	mA	

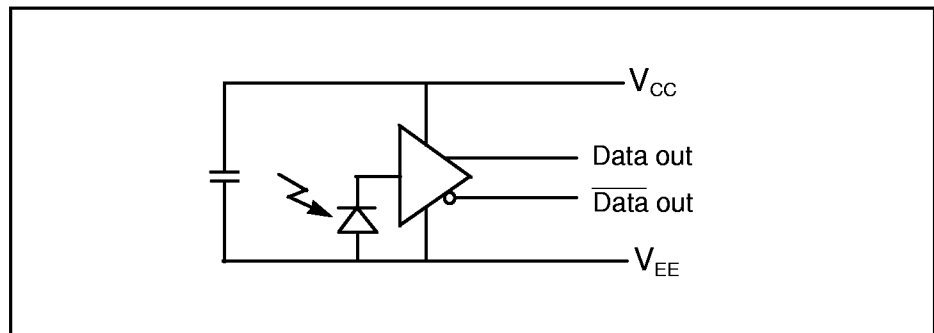
Operating Conditions: See table below. Fiber: Single-mode to multimode 62.5/125µm.

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Supply Voltage	$V_{CC}-V_{EE}$	0	6.0	V
Operating Temperature	T_{op}	0	70	°C
Storage Temperature	T_{stg}	-40	125	°C

Recommended Operating Conditions

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage	$V_{CC}-V_{EE}$	4.75	5.0	5.25	V
Output Differential Load	R_L		100		Ω



Functional schematic

13705.11 1999-01-13



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