

PRODUCT INFORMATION

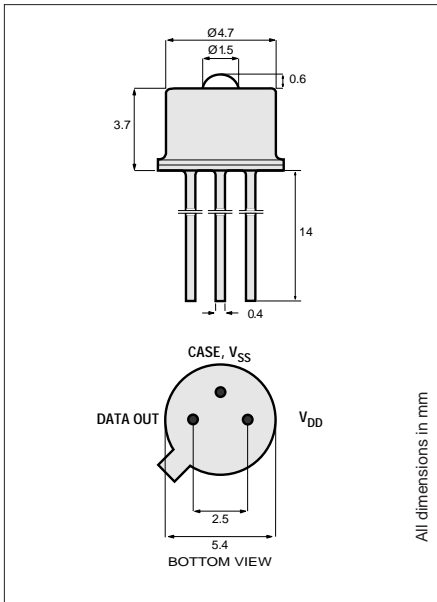
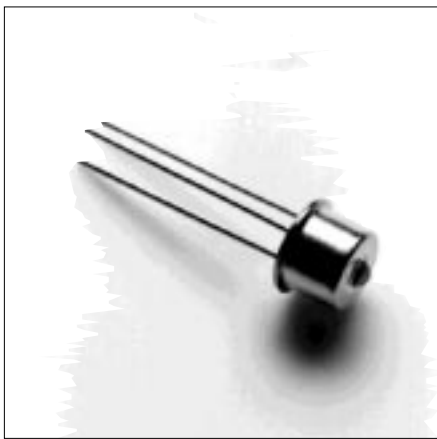
PRELIMINARY/β

1300nm
1550nm

8B428
PIN/Preamp

Datacom, Telecom

This device consists of a PIN photodiode and a transimpedance amplifier assembled in a TO-46 package. It is designed for Fibre Channel, Gigabit Ethernet, ATM and SDH/Sonet up to 622 Mbps. Its double-lens optical system is designed for single-mode fiber as well as for multimode fiber with core diameter up to 62.5µm.



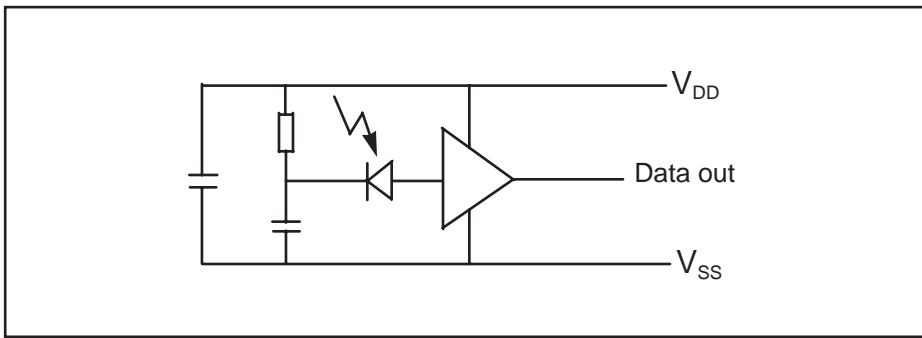
TO-46 Package With Lens

Optical and Electrical Characteristics (25° C Case Temperature)						
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Responsivity	<i>R</i>	1200	1650 2100	2200	V/W	λ=1300 nm λ=1550 nm P _f =10 µW
Bandwidth (3 dB _{el})	<i>f_c</i>		1		GHz	
Noise-Equivalent Power	<i>NEP</i>			350	nW	λ=1300 nm
Sensitivity (BER 10 ⁻⁹)	<i>S</i>		-27		dBm	λ=1300 nm Extinction Ratio=0
Dynamic Range			25		dB	
Output Resistance	<i>R_O</i>		3		Ω	
Power Supply Current	<i>I_{DD}</i>		56	70	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 _{DD} -V _{SS}	0	6.0	V
Operating Temperature	T _{Op}	-40	85	°C
Storage Temperature	T _{stg}	-55	125	°C

Recommended Operating Conditions					
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage	V _{DD} -V _{SS}	4.75	5.0	5.25	V
Output DC Load	R _L		50		Ω



Functional schematic

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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