

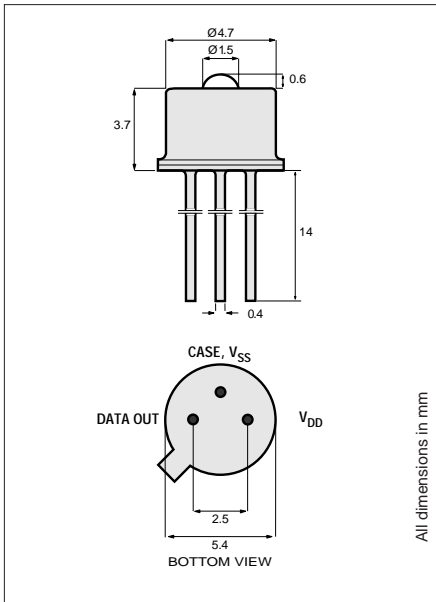
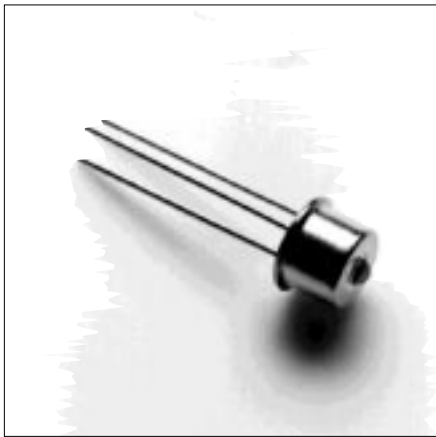
PRODUCT INFORMATION

PRELIMINARY/β

850nm **8B397**
PIN/Preamp

Datacom

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 and other VCSEL-based applications. Its double-lens optical system is designed for single-mode fiber as well as for multimode fiber with core diameter up to 62.5µm.



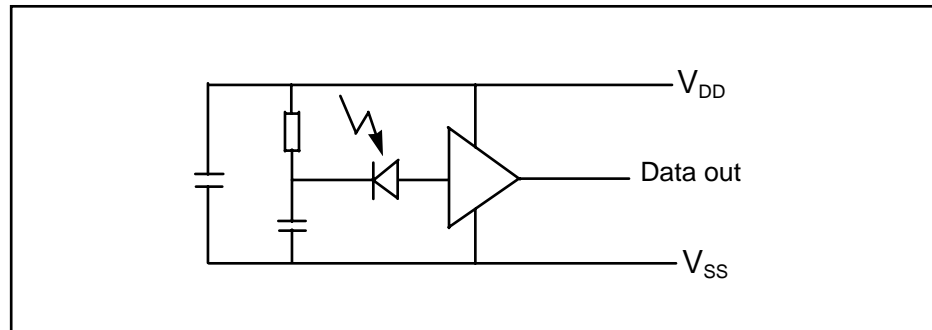
TO-46 Package With Lens

Optical and Electrical Characteristics (25° C Case Temperature)						
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Responsivity	R	600	1000	1500	V/W	$\lambda=850\text{ nm}$ $P_f=10\text{ }\mu\text{W}$
Bandwidth (3dB _{e1})	f_c		1		GHz	
Noise-Equivalent Power	NEP			600	nW	$\lambda=850\text{ nm}$
Sensitivity (BER 10 ⁻⁹)	S		-25		dBm	$\lambda=850\text{ nm}$ Extinction Ratio=0
Dynamic Range			25		dB	
Output Resistance	R_O		3		Ω	
Power Supply Current	I_{DD}		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