

2 Mb/s Optical Receiver (ORD-2M)



The ORD-2M receiver is designed for use in optical transmission systems and for optical supervisory channel monitoring in DWDM systems. This receiver converts an optical signal to an electrical signal, receiving data at rates up to 52 Mb/s. The ORD-2M is available with very high sensitivity. The wavelength of the optical signal can range from 1200 nm to 1600 nm. The receiver has a 9-pin DIP package. It operates with a single power supply, which is +5.0 V.

Features

- ▶ Data rates up to 52 Mb/s
- ▶ High sensitivity
- ▶ TTL data output
- ▶ LOS output
- ▶ +5.0 V single power supply
- ▶ 1 X 9 pin DIP package
- ▶ Package size : 38.0 x 25.4 x 12.0 (mm)

Applications

- ▶ Telecommunications
- ▶ 52M optical networking systems
- ▶ Optical subscriber access systems
- ▶ Optical supervisory channel monitoring in WDM systems
- ▶ Data communications



LiComm



TL9000



KSA 9001:2001
ISO 9001:2000

ORS

Absolute Maximum Ratings

Parameter		Min	Max	Unit
Supply voltage	V _{cc}	-0.5	5.5	V
Operating case temperature range		0	70	°C
Storage temperature range		-20	85	°C
Relative humidity (non-condensing)		-	85	%
Lead soldering temperature range		-	250/10	°C/S
Minimum fiber bendradius		25.4	-	mm

Specifications of Electrical Characteristics

Parameter		Min	Typ	Max	Unit
Bit rate			-	52	Mb/s
Supply voltage	V _{cc}	4.8	5.0	5.2	V
	I _{cc}	-	40	80	mA
Power dissipation		-	0.2	0.42	W
Output data voltage swing		TTL level			-
LOS output		TTL high			-

Specifications of Optical Characteristics

Parameter	Min	Typ	Max	Unit
Minimum sensitivity ¹	-	-38.0	-36.0	dBm
Minimum overload ¹	+1.0	-	-	dBm

1. At 1510nm wavelength, 2Mbps and 1 x 10⁻¹⁶ BER with 2²³ -1 NRZ pseudo-random data

Pin Configurations

Pin No.	Description
1	Ground
2	Received data output
3	No connection
4	Loss of signal
5	V _{cc}
6	No connection
7	No connection
8	No connection
9	Ground

Outline Drawings

