10 Gb/s Optical Receiver (ORM64)

The ORM64 is a receiver module which is designed for the OC-192 SONET system and STM-64 SDH transport system. The module is comprised of a PIN PD with a Trans-Impedance Amplifier(TIA) and a Limiting Amplifier(LIA) and operates over both 1310 and 1550nm windows. The electrical data output is commercially used with a SMA, GPO or K-connector. The receiver has low profile 24-pin DIP type package. The receivcer supports the loss of signal (LOS) detection function. It operates with a single power supply, which is +5.0 V

Features

- High sensitivity optical receiver module including PIN-PD, low noise TIA and limiting amplifier
- Low power consumption
- Data output interface with SMA, GPO, K-connector
- Non-inverted, single-end AC-couple output
- Wavelength range, 1200 nm ~ 1600 nm
- LOS alarm output
- +5V single power supply
- 24 pin DIP type
- Package size : 58.59 x 35.6 x 13 (mm)

Applications

- High-speed and long-haul DWDM networks
- Metropolitan networks

Specifications of Optical Characteristics

Parameter	Min	Typ	Max	Unit
Wavelength range	1200	-	1600	nm
Receiver sensitivity [1]	-	-17	-	dBm
Overload [1]	-	0	-	dBm
Input optical reflectance	-	-	-27	dB

1. At 1.55μm wavelength and 1x 10^{-10} BER with 2^{23}-1 NRZ pseudo-random data

Specifications of Electrical Characteristics

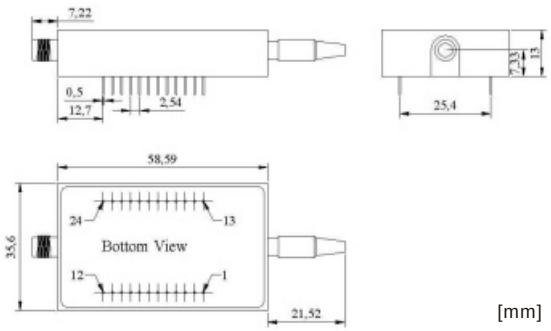
Parameter		Min	Typ	Max	Unit
Bit rate		OC-192, STM-64			
Supply voltage	Vcc	4.75	5.0	5.25	V
	Icc	-	300	700	mA
Power consumption		-	1.3	1.7	W
Vout		500	-	-	mVp-p

Pin Configurations

Pin No.	Description	Pin No.	Description
1	No connection	13	No connection
2	No connection	14	Ground
3	Loss of signal/Input power monitoring[1]	15	Ground
4	Ground	16	Ground
5	No connection	17	Ground
6	No connection	18	No connection
7	Ground	19	Ground
8	Vcc	20	Ground
9	Ground	21	Ground
10	No connection	22	Vcc
11	No connection	23	No connection
12	Ground	24	No connection

1. When this pin is assigned LOS of signal, normal output is TTL low.

Outline Drawings



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