

PT4253-5-***-*

OC-24 PIN+TIA Receiver Module

1 Feature

- 1.1 Long Wavelength Operation
- 1.2 Low voltage power supply: 3.3V
- 1.3 Packaging: TO-46 with 4-pins
- 1.4 Internal AGC Circuit
- 1.5 Differential output
- 1.6 High Reliability
- 1.7 High Sensitivity

2 Application

- 2.1 Telecommunication
- 2.2 Data communication

3 General

The OC-24 Coaxial PIN+TIA Receiver Module is designed for use in SONET/SDH transceivers and meet the rigorous failure rate standards for today's telecom and datacom devices.

The Receiver Module integrates a pigtail optical port with a 4 Pins TO-CAN that includes the high-speed PIN and a matching TIA(transimpedance amplifier).

4 Performance Specifications

4.1 Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Comments
Storage Temperature	T _{stg}	-40	+85	°C	-
Operating Temperature	T _{op}	-40	+85	°C	-
Storage and Operating Humidity	-	-	85	%	-
TIA Supply Voltage	V _{CC}	0	+4	V	-
Lead Soldering Temperature/time	T _{sld} /t	-	260/10	°C/s	Temperature/Time

4.2 O-E characteristics

Top=-40~+85℃, Vcc=3.1~3.5V, unless otherwise specified

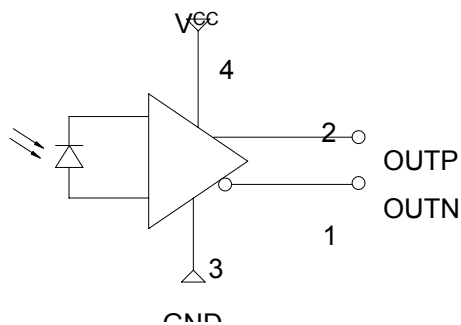
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Optical Wavelength	λ	1260	-	1650	nm	-
Supply Current	Icc	-	30	39	mA	DC
-3dB Bandwidth	BW	750	-	-	MHz	AC, RL=50Ω, Pin=-20dBm, λ =1310nm
Optical sensitivity	Pr	-	-	-24	dBm	AC, RL=50Ω,NRZ 1.24416Gbps, PRBS=2 ²³ -1 BER=10 ⁻¹⁰ , λ =1310nm
Saturation Power	Ps	-3	-	-	dBm	
Output Impedance	Zo	-	50	-	Ω	-
Transimpedance	Zt	24	30	35	KΩ	Differential

5 Pin Definitions

5.1 Pin Diagram

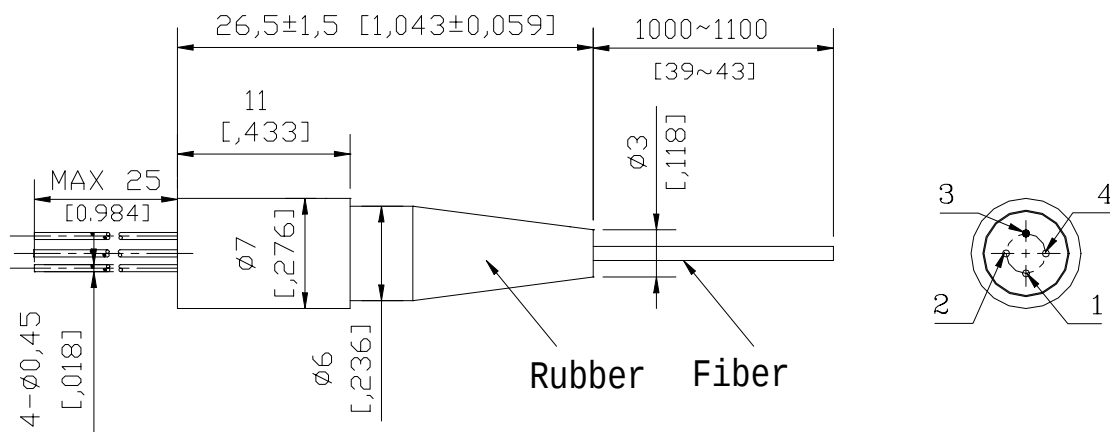
Refer to 6(Package information)

5.2 Pin Descriptions

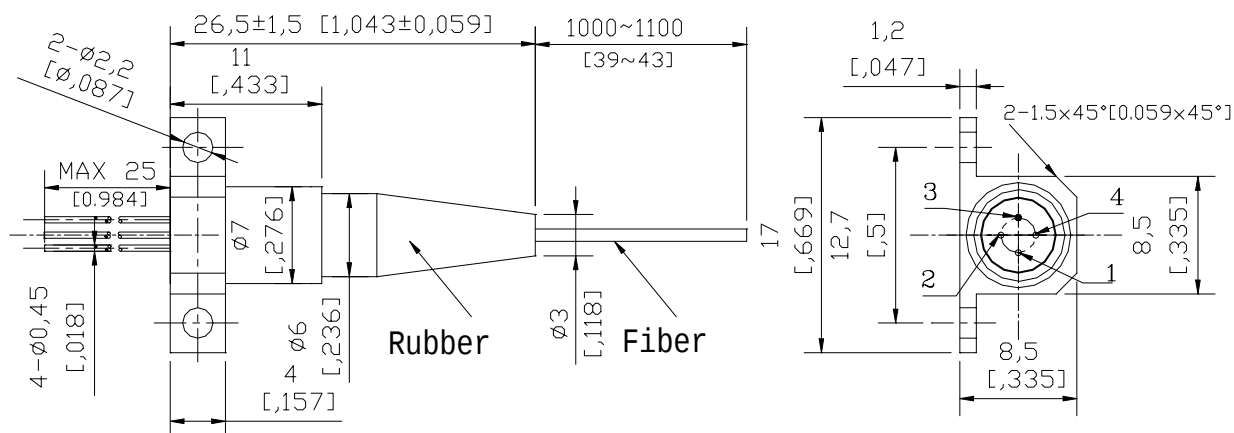


6 Package information

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7 Application Cautions

7.1 Electrostatic protection:

Soldering irons, assembly workbenches and other tools and fixtures should be grounded to discharge static electricity.

Workers should wear antistatic clothes and be grounded via a wristband with high resistance (~10kΩ) for safe discharge of static electricity.

7.2 The soldering conditions:

Temperature: <260°C

Time: <10 seconds

7.3 Be sure to carry out correct soldering for connection to peripheral circuits firmly in order to prevent contact failure or short-circuit. Otherwise, breakdown by overcurrent, overheat or fire may occur.

7.4 Be sure to turn power off when you touch this product connected to the printed circuit boards. Otherwise, electric shock or burn may occur.

7.5 Use the product with the rated voltage described in the specification. If the voltage exceeds the maximum rating, overheating or fire might occur.

8 Ordering Information

