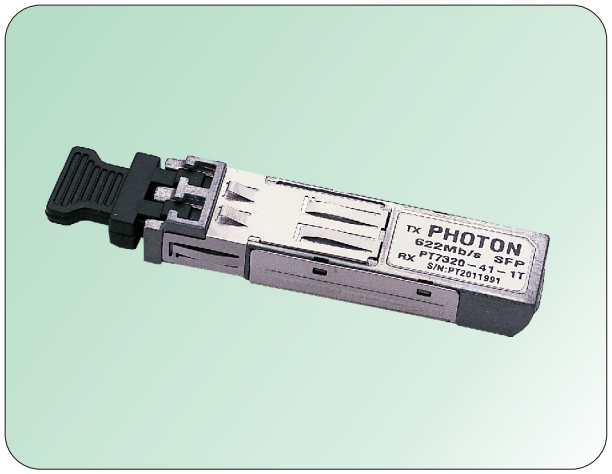
# SFP Transceiver with LC Connector



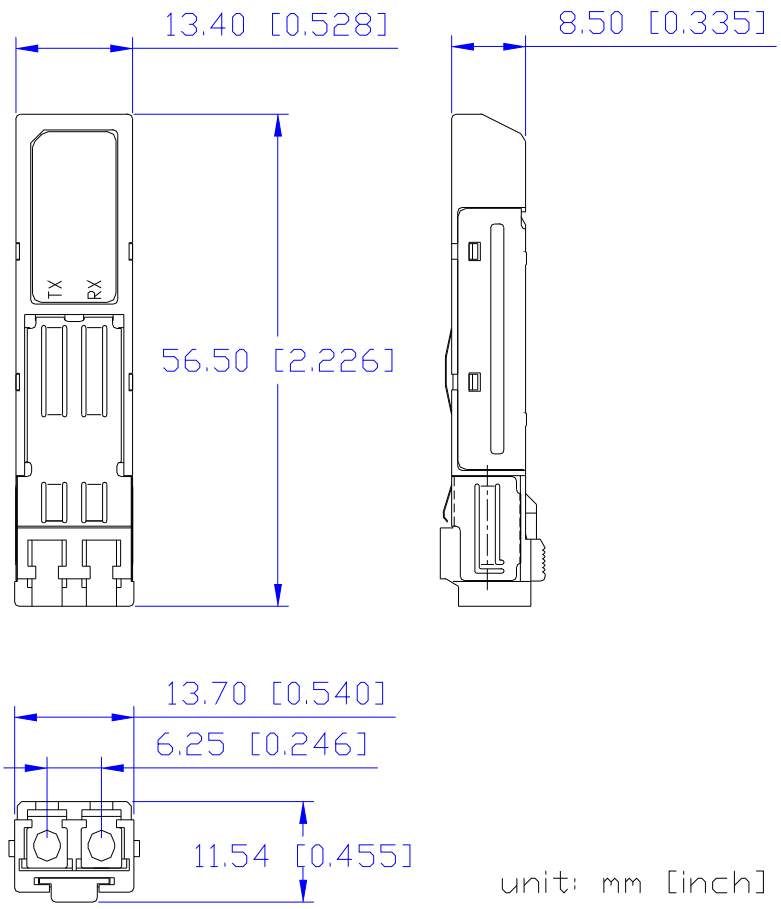

## Features

- Transceiver unit with independent transmitter and receiver
- Small Form Factor Pluggable (SFP) Multi-Source Agreement (MSA) compliant
- Hot-pluggable
- +3.3 Volt DC power supply
- LC-Duplex fiber connector compatible
- SONET/SDH/IEE802.3 applications
- compliant facility Manufactured in an ISO 9001

## Description

The SFP transceiver is compliant with the specifications the SDH/SONET/IEEE802.3 and the Small Form-Factor Pluggable (SFP) Multi-Source Agreement(MSA) and SFF-8472. It reliability benefits by virtue of being hot-pluggable. Further, it incorporates the latest 3.3 VDC compatible transceiver technology including an 1310nm/1550nm FP/DFB LD transmitter as well as a convenient LC-Duplex optical interface.

## Mechanical Outline



**Data Rate/Distance/Part Number Reference Table for SFP General Purpose Design**

| Typical Data Rate (Mb/s) | Typical Transfer Distance (km) | Part Number | Emitter/Deter |
|---|---|---|---|
| 125/155 | 30 | PT7320-31-1T/PT7320-31-1TD | 1310nm FPLD/PINTIA |
| | | PT7320-32-1T/PT7320-32-1TD | 1310nm FPLD/PINTIA |
| | 60 | PT7320-31-2T/PT7320-31-2TD | 1310nm FPLD/PINTIA |
| | | PT7320-32-2T/ PT7320-32-2TD | 1310nm FPLD/PINTIA |
| | | PT7420-31-2T/ PT7420-31-2TD | 1310nm DFBLD/PINTIA |
| | | PT7420-32-2T/ PT7420-32-2TD | 1310nm DFBLD/PINTIA |
| | 100 | PT7620-31-2T/ PT7620-31-2TD | 1550nm DFBLD/PINTIA |
| | | PT7620-32-2T/ PT7420-32-2TD | 1550nm DFBLD/PINTIA |
| 622 | 15 | PT7320-41-1T/ PT7320-41-1TD | 1310nm FPLD/PINTIA |
| | | PT7320-42-1T/PT7320-42-1TD | 1310nm FPLD/PINTIA |
| | 40 | PT7320-41-2T/PT7320-41-2TD | 1310nm FPLD/PINTIA |
| | | PT7320-41-2T/PT7320-41-2TD | 1310nm FPLD/PINTIA |
| | | PT7420-41-2T/PT7420-41-2TD | 1310nm DFBLD/PINTIA |
| | | PT7420-42-2T/PT7420-42-2TD | 1310nm DFBLD/PINTIA |
| | 80 | PT7620-41-2T/PT7620-41-2TD | 1550nm DFBLD/PINTIA |
| | | PT7620-42-2T/PT7620-42-2TD | 1550nm DFBLD/PINTIA |
| 1062.5/1250 | 10 | PT7320-51-1T/PT7320-51-1TD | 1310nm FPLD/PINTIA |
| | | PT7320-52-1T/PT7320-52-1TD | 1310nm FPLD/PINTIA |
| | 30 | PT7320-51-2T/PT7320-51-2TD | 1310nm FPLD/PINTIA |
| | | PT7420-51-2T/PT7420-51-2TD | 1310nm DFBLD/PINTIA |
| | | PT7420-52-2T/PT7420-52-2TD | 1310nm DFBLD/PINTIA |
| | 60 | PT7620-51-2T/PT7620-51-2TD | 1550nm DFBLD/PINTIA |
| | | PT7620-52-2T/PT7620-52-2TD | 1550nm DFBLD/PINTIA |
| 2488 | 2 | PT7320-61-1T/PT7320-61-1TD | 1310nm FPLD/PINTIA |
| | | PT7320-62-1T/PT7320-62-1TD | 1310nm FPLD/PINTIA |
| | 15 | PT7420-61-2T/ PT7420-61-2TD | 1310nm DFBLD/PINTIA |
| | | PT7620-61-2T/PT7620-61-2TD | 1550nm DFBLD/PINTIA |
| | 40 | PT7720-61-3T/PT7720-61-3TD | 1310nm DFBLD/APDTIA |
| | 80 | PT7820-61-3T/PT7820-61-3TD | 1550nm DFBLD/APDTIA |

## Ordering information

PT 7 □ 20 —□□—□ T □

D:Meet SFF-8472
Blank: Without Digital Diagnostic Monitoring

## Absolute Maximum Ratings

| Parameter | Symbol | | Minimum | Maximum | Units |
|---|---|---|---|---|---|
| Storage Temperature | Tst | | -40 | +85 | ℃ |
| Operating Temperature | To | PT7□□□-□1-□ | 0 | +70 | ℃ |
| | | PT7□□□-□2-□ | -40 | +85 | |
| Input Voltage | - | | GND | Vcc | V |
| Power Supply Voltage | PT7□1□-□□-□ | | – | +6 | V |
| | PT7□2□-□□-□ | | – | +3.6 | |
| Data Rates | PT7□□□-3□-□ | | 5 | 200 | Mb/s |
| | PT7□□□-4□-□ | | 5 | 700 | |
| | PT7□□□-5□-□ | | 5 | 1300 | |
| | PT7□□□-6□-□ | | 5 | 2600 | |

## Transmitter E-O characteristics

| Parameter | Symbol | | Minimum | Typical | Maximum | Unit | Note |
|---|---|---|---|---|---|---|---|
| Center Wavelength | l | PT73□□-□□-□ | | 1310 | | nm | - |
| | | PT74□□-□□-□ | | 1310 | | | |
| | | PT75□□-□□-□ | | 1550 | | | |
| | | PT76□□-□□-□ | | 1550 | | | |
| | | PT77□□-□□-□ | | 1310 | | | |
| | | PT78□□-□□-□ | | 1550 | | | |

## Receiver O-E characteristics

| Parameter | Symbol | | Minimum | Typical | Maximum | Unit | Note |
|---|---|---|---|---|---|---|---|
| Operate wavelength | - | | 1260 | | 1610 | nm | |
| Sensitivity | Pr | PT7□□□-3□-□ | - | -35 | -31 | dBm | |
| | | PT7□□□-4□-□ | - | -32 | -30 | | |
| | | PT7□□□-5□-□ | - | -25 | -23 | | |
| | | PT73□□-6□-□ | - | -21 | -19 | | |
| | | PT74□□-6□-□ | - | -21 | -19 | | |
| | | PT77□□-6□-□ | - | -30 | -27 | | |
| | | PT78□□-6□-□ | - | -31 | -28 | | |

## Ordering information

PT 7 □ □ □ – □ □ – □ □

- Signal Detect logic level
  - Blank : PECL level
  - T : TTL level
- Output power
  （See table below）
- Operating temperature:
  - 1: 0~70C
  - 2: -40~85C
- Typical Data Rate:
  - 2: 52 Mb/s
  - 3: 155 Mb/s
  - 4: 622 Mb/s
  - 5: 1200 Mb/s
  - 6: 2500Mb/s
- Package Style:
  - 1: 1X9 SIP Duplex SC
  - 2: 2X9 DIP Duplex SC with CDR
  - 3: 2X5 SFF DIP Duplex LC
  - 4: 2X10 SFF DIP Duplex LC with CDR
  - 5: 1X9 SIP with pigtail
  - 7: 2X9 DIP Duplex SC without CDR
  - 9: 2X10 SFF DIP Duplex LC without CDR
  - 0: SFP Duplex LC without CDR
- Power Supply:
  - 1: +5V
  - 2: +3.3V
- Transmitter/Receiver Device:
  - 3: 1310nm FP-LD/PINTIA
  - 4: 1310nm DFB-LD/PINTIA
  - 5: 1550nm FP-LD/PINTIA
  - 6: 1550nm DFB-LD/PINTIA
  - 7: 1310nm DFBLD/APDTIA
  - 8: 1550nm DFBLD/APDTIA

## Output power table

| Output Power / Mode | 1 | 2 | 3 | Unit |
|---|---|---|---|---|
| PT7□□−3□− | -15~-8 | -5~0 | -8~-5 | dBm |
| PT7□□−4□− | -15~-8 | -3~+2 | -8~-3 | |
| PT7□□−5□− | -10~-3 | -3~+2 | >0 | |
| PT7□□−6□− | -10~-3 | -5~0 | -2~+3 | |