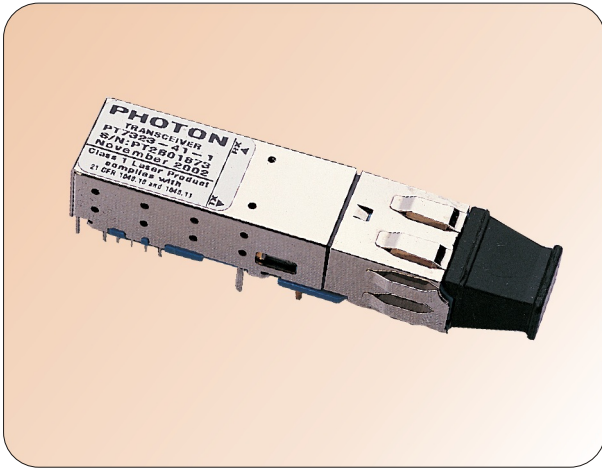


SFF Transceiver with LC Connector



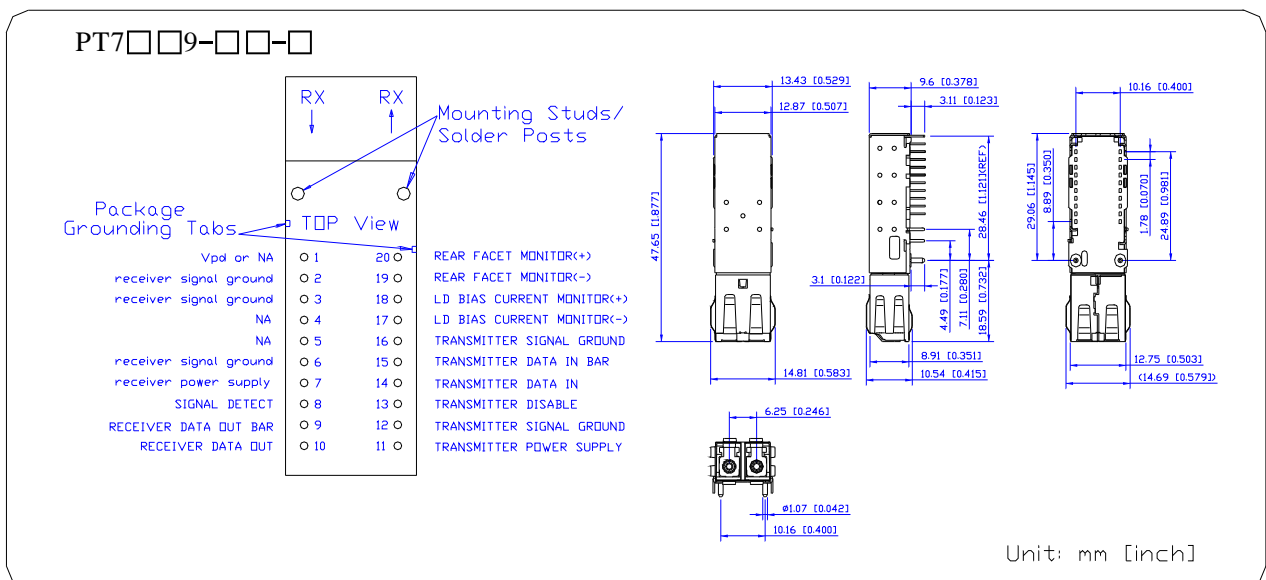
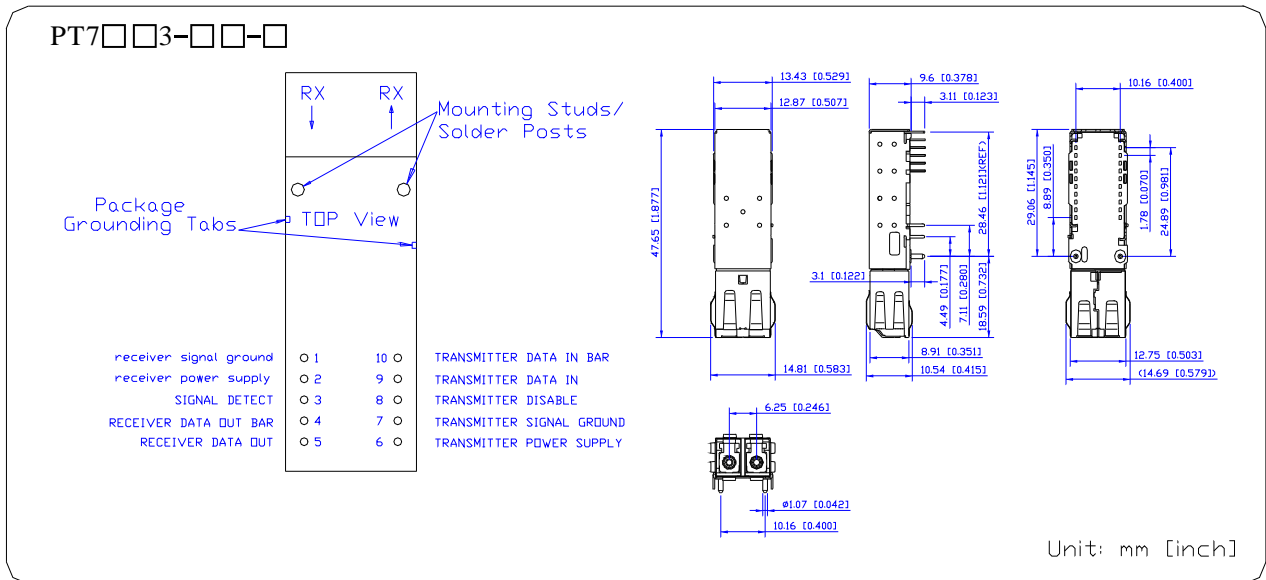
Features

- Transceiver unit with independent transmitter and receiver
- Small Form Factor (SFF) Multi-Source Agreement (MSA) compliant
- 2×5 or 2×10 Foot Print
- +3.3 Volt DC power supply
- LC-Duplex fiber connector compatible
- SONET/SDH/IEEE802.3 applications
- compliant facility Manufactured in an ISO 9001

Description

The SFF transceiver is compliant with the specifications the SDH/SONET/IEEE802.3 and the Small Form Factor (SFF) Multi-Source Agreement(MSA) .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



SFF Transceiver with LC Connector

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

Typical Data Rate (Mb/s)	Typical Transfer Distance (km)	Part Number	Foot Print	Emitter/Deter	SD Logic Level
125/155	30	PT7323-31-1	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7323-32-1	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7329-31-1	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7329-32-1	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7323-31-1T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7323-32-1T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7329-31-1T	2×10	1310nm FPLD/PINTIA	LVTTTL
		PT7329-32-1T	2×10	1310nm FPLD/PINTIA	LVTTTL
	60	PT7323-31-2	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7323-32-2	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7329-31-2	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7329-32-2	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7323-31-2T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7323-32-2T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7329-31-2T	2×10	1310nm FPLD/PINTIA	LVTTTL
		PT7329-32-2T	2×10	1310nm FPLD/PINTIA	LVTTTL
		PT7423-31-2	2×5	1310nm DFBLD/PINTIA	LVPECL
		PT7423-32-2	2×5	1310nm DFBLD/PINTIA	LVPECL
		PT7429-31-2	2×10	1310nm DFBLD/PINTIA	LVPECL
		PT7429-32-2	2×10	1310nm DFBLD/PINTIA	LVPECL
		PT7423-31-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL
		PT7423-32-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL
		PT7429-31-2T	2×10	1310nm DFBLD/PINTIA	LVTTTL
		PT7429-32-2T	2×10	1310nm DFBLD/PINTIA	LVTTTL
	100	PT7623-31-2	2×5	1550nm DFBLD/PINTIA	LVPECL
		PT7623-32-2	2×5	1550nm DFBLD/PINTIA	LVPECL
		PT7629-31-2	2×10	1550nm DFBLD/PINTIA	LVPECL
PT7629-32-2		2×10	1550nm DFBLD/PINTIA	LVPECL	
PT7623-31-2T		2×5	1550nm DFBLD/PINTIA	LVTTTL	
PT7623-32-2T		2×5	1550nm DFBLD/PINTIA	LVTTTL	
PT7629-31-2T		2×10	1550nm DFBLD/PINTIA	LVTTTL	
PT7629-32-2T		2×10	1550nm DFBLD/PINTIA	LVTTTL	

SFF Transceiver with LC Connector

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

Typical Data Rate (Mb/s)	Typical Transfer Distance (km)	Part Number	Foot Print	Emitter/Deter	SD Logic Level
622	15	PT7323-41-1	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7323-42-1	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7329-41-1	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7329-42-1	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7323-41-1T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7323-42-1T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7329-41-1T	2×10	1310nm FPLD/PINTIA	LVTTTL
		PT7329-42-1T	2×10	1310nm FPLD/PINTIA	LVTTTL
	40	PT7323-41-2	2×5	1310nm FPLD/PINTIA	LVPECL
		PT7329-41-2	2×10	1310nm FPLD/PINTIA	LVPECL
		PT7323-41-2T	2×5	1310nm FPLD/PINTIA	LVTTTL
		PT7329-41-2T	2×10	1310nm FPLD/PINTIA	LVTTTL
		PT7423-41-2	2×5	1310nm DFBLD/PINTIA	LVPECL
		PT7423-42-2	2×5	1310nm DFBLD/PINTIA	LVPECL
		PT7429-41-2	2×10	1310nm DFBLD/PINTIA	LVPECL
		PT7429-42-2	2×10	1310nm DFBLD/PINTIA	LVPECL
		PT7423-41-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL
		PT7423-42-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL
		PT7429-41-2T	2×10	1310nm DFBLD/PINTIA	LVTTTL
		PT7429-42-2T	2×10	1310nm DFBLD/PINTIA	LVTTTL
	80	PT7623-41-2	2×5	1550nm DFBLD/PINTIA	LVPECL
		PT7623-42-2	2×5	1550nm DFBLD/PINTIA	LVPECL
		PT7629-41-2	2×10	1550nm DFBLD/PINTIA	LVPECL
		PT7629-42-2	2×10	1550nm DFBLD/PINTIA	LVPECL
		PT7623-41-2T	2×5	1550nm DFBLD/PINTIA	LVTTTL
		PT7623-42-2T	2×5	1550nm DFBLD/PINTIA	LVTTTL
		PT7629-41-2T	2×10	1550nm DFBLD/PINTIA	LVTTTL
PT7629-42-2T		2×10	1550nm DFBLD/PINTIA	LVTTTL	

SFF Transceiver with LC Connector

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

Typical Data Rate (Mb/s)	Typical Transfer Distance (km)	Part Number	Foot Print	Emitter/Deter	SD Logic Level	
1062.5/1250	10	PT7323-51-1	2×5	1310nm FPLD/PINTIA	LVPECL	
		PT7323-52-1	2×5	1310nm FPLD/PINTIA	LVPECL	
		PT7329-51-1	2×10	1310nm FPLD/PINTIA	LVPECL	
		PT7329-52-1	2×10	1310nm FPLD/PINTIA	LVPECL	
		PT7323-51-1T	2×5	1310nm FPLD/PINTIA	LVTTTL	
		PT7323-52-1T	2×5	1310nm FPLD/PINTIA	LVTTTL	
		PT7329-51-1T	2×10	1310nm FPLD/PINTIA	LVTTTL	
		PT7329-52-1T	2×10	1310nm FPLD/PINTIA	LVTTTL	
	30	PT7323-51-2	2×5	1310nm FPLD/PINTIA	LVPECL	
		PT7329-51-2	2×10	1310nm FPLD/PINTIA	LVPECL	
		PT7323-51-2T	2×5	1310nm FPLD/PINTIA	LVTTTL	
		PT7329-51-2T	2×10	1310nm FPLD/PINTIA	LVTTTL	
		PT7423-51-2	2×5	1310nm DFBLD/PINTIA	LVPECL	
		PT7423-52-2	2×5	1310nm DFBLD/PINTIA	LVPECL	
		PT7429-51-2	2×10	1310nm DFBLD/PINTIA	LVPECL	
		PT7429-52-2	2×10	1310nm DFBLD/PINTIA	LVPECL	
		PT7423-51-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL	
		PT7423-52-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL	
		PT7429-51-2T	2×10	1310nm DFBLD/PINTIA	LVTTTL	
		PT7429-52-2T	2×10	1310nm DFBLD/PINTIA	LVTTTL	
	60	PT7623-51-2	2×5	1550nm DFBLD/PINTIA	LVPECL	
		PT7623-52-2	2×5	1550nm DFBLD/PINTIA	LVPECL	
		PT7629-51-2	2×10	1550nm DFBLD/PINTIA	LVPECL	
		PT7629-52-2	2×10	1550nm DFBLD/PINTIA	LVPECL	
		PT7623-51-2T	2×5	1550nm DFBLD/PINTIA	LVTTTL	
		PT7623-52-2T	2×5	1550nm DFBLD/PINTIA	LVTTTL	
		PT7629-51-2T	2×10	1550nm DFBLD/PINTIA	LVTTTL	
		PT7629-52-2T	2×10	1550nm DFBLD/PINTIA	LVTTTL	
	2488	2	PT7323-61-1T	2×5	1310nm FPLD/PINTIA	LVTTTL
			PT7323-62-1T	2×5	1310nm FPLD/PINTIA	LVTTTL
PT7329-61-1T			2×10	1310nm FPLD/PINTIA	LVTTTL	
PT7329-62-1T			2×10	1310nm FPLD/PINTIA	LVTTTL	
15		PT7423-61-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL	
		PT7429-61-2T	2×5	1310nm DFBLD/PINTIA	LVTTTL	
		PT7623-61-2T	2×10	1550nm DFBLD/PINTIA	LVTTTL	
		PT7623-61-2T	2×10	1550nm DFBLD/PINTIA	LVTTTL	
40		PT7723-61-3T	2×5	1310nm DFBLD/APDTIA	LVTTTL	
		PT7729-61-3T	2×10	1310nm DFBLD/APDTIA	LVTTTL	
80		PT7823-61-3T	2×5	1550nm DFBLD/APDTIA	LVTTTL	
		PT7829-61-3T	2×10	1550nm DFBLD/APDTIA	LVTTTL	

Specification of Transceiver

Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Units	
Storage Temperature	Tst	-40	+85	°C	
Operating Temperature	To	PT7□□□-□1-□	0	+70	°C
		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	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		

Specification of Transceiver

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	