

GPTP-A13Exx

3Gbps PIN-TIA Receiver With Pigtail Modules



Features

- ◆ High sensitivity
- ◆ Differential ended output
- ◆ Single +3.3 operation
- ◆ Trans-impedance amplifier with AGC
- ◆ RoHS Compliant Products Available

Applications

- ◆ 3Gbps application
- ◆ SDH/SONET application

General

GPTP-A13Exx Series is a 5 pin PIN-TIA with pigtail operating on 3Gbps. It provides high sensitivity with AGC, 100ohm differential outputs and the 5 pin PIN-TIA provides a monitor pin. A photodiode is mounted into a low capacitance coaxial package integrated with a pigtail.

Ordering Information (Standard version* ^{Note1})

Part No.	Wavelength (nm)	Voltage (V)	Package	Pin Type	Connector
GPTP-A13EAF	1100~1650	3.3	A	E	FC/PC
GPTP-A13EBSA	1100~1650	3.3	B	E	SC/APC
GPTP-A13ECT	1100~1650	3.3	C	E	ST/PC
GPTP-A13EDL	1100~1650	3.3	D	E	LC/PC
GPTP-A13EES	1100~1650	3.3	E	E	SC/PC

*Note1: For more ordering information, please refer the nomenclature and contact EPOTOLINK sales.

Absolute maximum ratings ^{*Note2}

Parameter	Min	Typ.	Max	Unit
Storage Temperature	-40	25	100	°C
Operating Temperature	-40	25	85	°C
TIA Supply Voltage	3.0	3.3	3.6	V
Operation Relative Humidity	-		85	%
Soldering Temperature / Time	-		260/10	°C/S

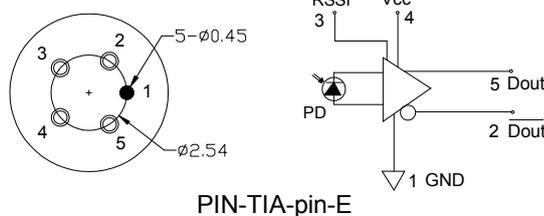
*Note2: Exceeding any one of these values may destroy the device permanently.

Electrical and optical characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Wavelength	λ	1100	1310	1650	nm	
Supply Current	I _{cc}		42	50	mA	V _{cc} =3.3V
Output Voltage(differential)	V _{op}	150	280		mV	R _L =100Ω
High Frequency Bandwidth(-3dBm)	BW	1.8	3.4		GHz	R _L =50Ω
Low Frequency Bandwidth	BW1		500	750	Hz	R _L =50Ω
Sensitivity	S		-22	-21	dBm	λ =1310nm, Speed=3Gbps PRBS=2 ²³ -1, BER=10 ⁻¹² , ER=7.0dB
Overload Power	P _{load}	0			dBm	PRBS=2 ²³ -1, BER=10 ⁻¹² , ER=7.0dB
Rise /FallTime	T		150/150		ps	20~80%
Optical Power	P _{in}			5	dBm	

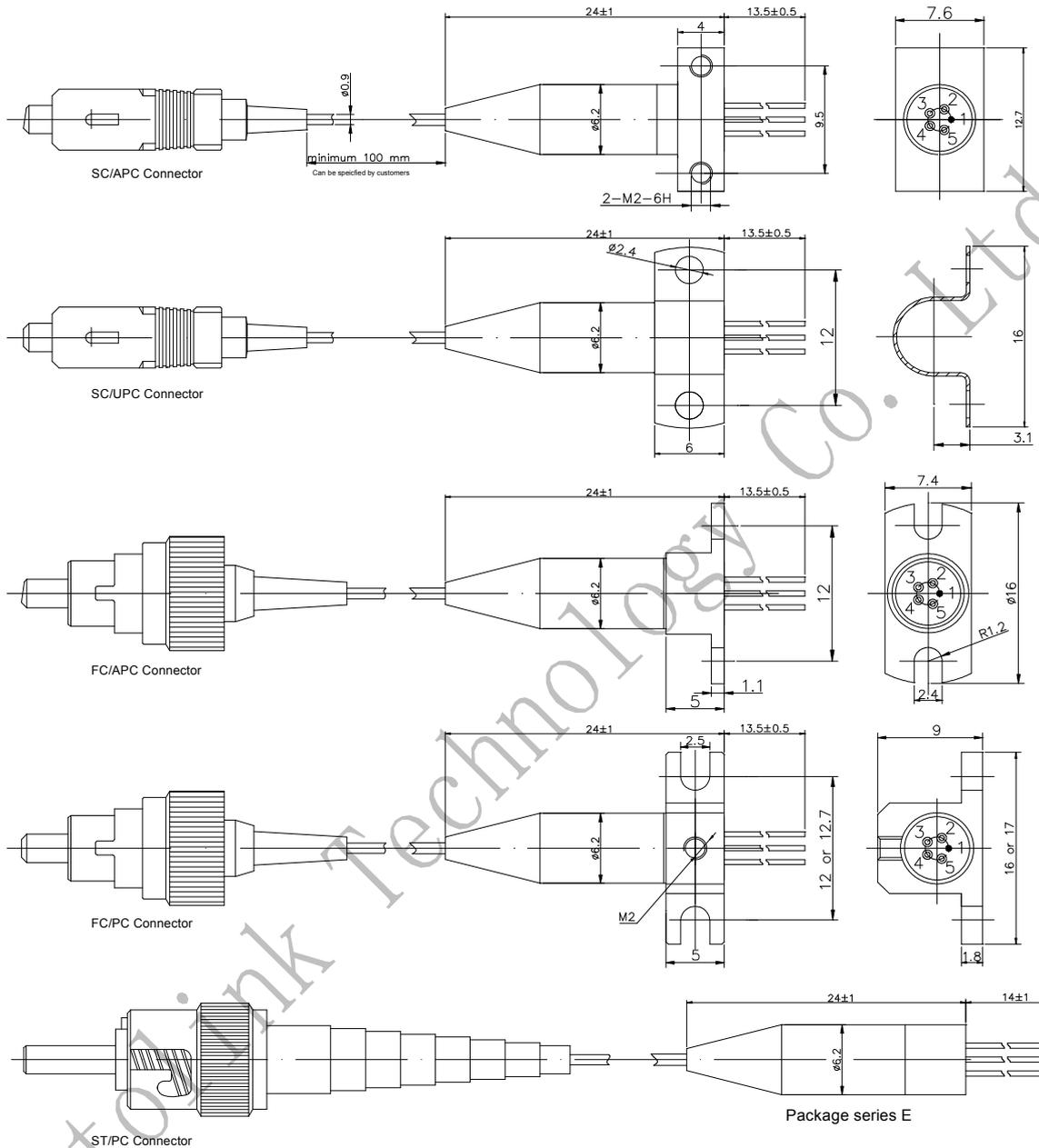
Pin Assignment ^{*Note3}

TYPE: E



Note3: Other Pin type can be customized.

Pigtail Package dimension *Note4· 5· 6



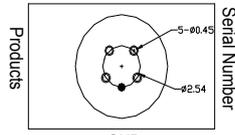
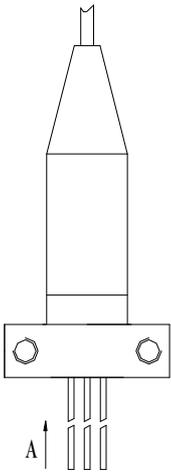
*Note4: PIN direction and laser mark can be customized. Pigtail is standard SM fiber; the length also can be customized.

*Note5: For the package series D, the clamping rings dimensions (A) and drill size (B) are can be selected. The following types can be available. Please designate the detailed type while ordering the package series D.

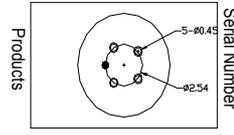
	A(mm)	B(mm)
D	16	12
D-S	17	12.7

*Note6: For the package series B, the fix card is fixed by customer self. For the detailed information of fix card of A, C, D package series, please refers the following graphs.

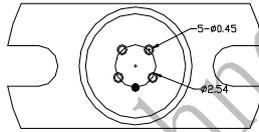
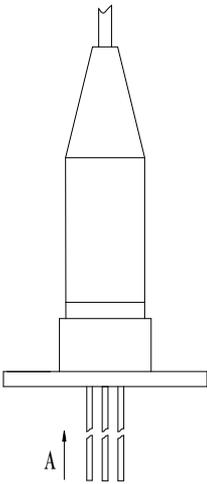
The direction of fix card



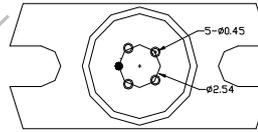
Direction A view
PPT5A-1(DEFAULT)



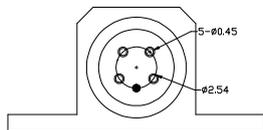
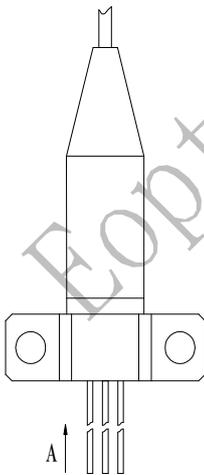
Direction A view
PPT5A-2



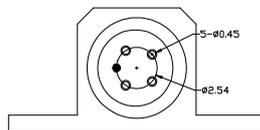
Direction A view
PPT5C-1(DEFAULT)



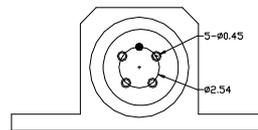
Direction A view
PPT5C-2



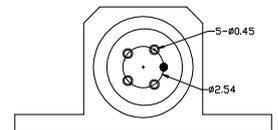
Direction A view
PPT5D-1(DEFAULT)



Direction A view
PPT5D-2



Direction A view
PPT5D-3



Direction A view
PPT5D-4

Obtaining Document

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<http://www.eoptolink.com>

Or contact Eoptolink Technology Inc., Ltd. listed at the end of the documentation to get the latest documentation.

Revision History

Verision	Initiated	Reviewed	Revision History	Release Date
Va-1	Zore.Zhao	Kelly.Cao		2010-12-10
Vb-1	Jack.jiang	Kelly.Cao Yinchun.Zhao	LOGO	2011-11-2
Vb-2	Jack.jiang	Kelly.Cao Yinchun.Zhao	Add"Rise/Fall Time"	2011-11-3
Vb-3	Jack.jiang	Kelly.Cao Yinchun.Zhao	Changed Details	2013-1-13

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