

GPTR-T13Exx

10Gbps PIN-TIA receiver modules (Receptacle module)



Features

- ◆ High sensitivity
- ◆ Differential ended output
- ◆ Single +3.3V operation
- ◆ Trans-impedance amplifier with AGC
- ◆ RoHS compliant products available

Applications

- ◆ 10Gbps bit rate application
- ◆ Fast Ethernet receiver/transceiver application

Ordering Information (Standard version ^{*Note1})

Part No.	Wavelength (nm)	Voltage (V)	Package	Pin Type	Insulation
GPTR-T13EAJ	1260~1620	3.3	A	E	Y
GPTR-T13EE	1260~1620	3.3	E	E	N
GPTR-T13EF	1260~1620	3.3	F	E	N
GPTR-T13ETJ	1260~1620	3.3	T	E	Y

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

Absolute maximum ratings

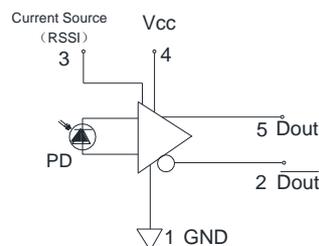
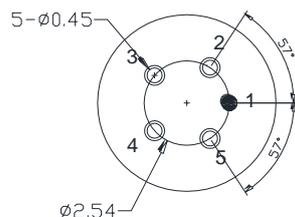
Parameter	Min	Typ.	Max	Unit
Storage temperature	-40	25	100	°C
Operating temperature	-40	25	85	°C
TIA supply voltage	-0.1	3.3	4	V
PD reverse voltage	-	-	15	V
Operation relative humidity	-	-	85	%
Soldering temperature / time	-	-	260/10	°C/s

Electrical and optical characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Operating wavelength	λ	1260	-	1620	nm	
Supply current	I _{cc}	-	28.5	-	mA	No Loads, V _{cc} =3.3V
Saturation power	P _{sat}	0.5	-	-	dBm	
Sensitivity	S	-	-	-16.5	dBm	1310nm, 10Gbps, BER=1E ⁻¹² , PRBS= 2 ²³ -1
Output resistance	R _o	-	50	-	Ω	
Rise /Fall time	T	-	-	4.5	ps	10~90%
High Frequency bandwidth	Bw	-	7	-	GHz	at -3dBm

Pin assignment ^{*Note2}

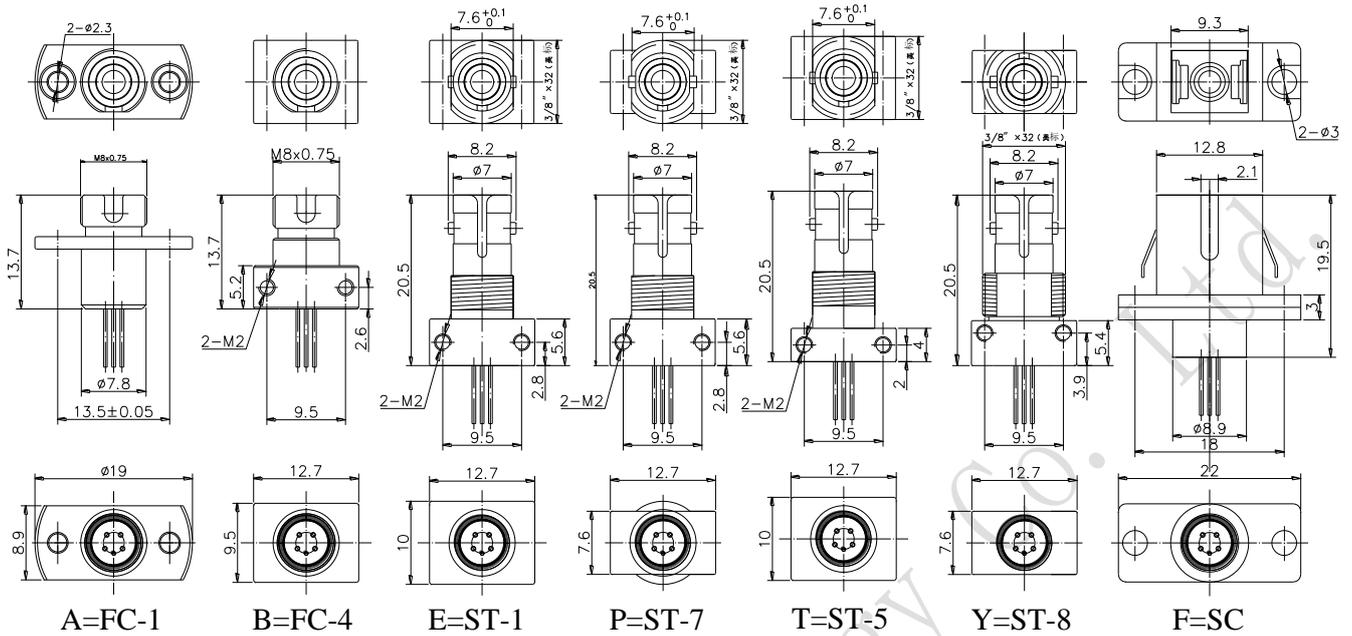
TYPE: E



PIN-TIA-pin-E

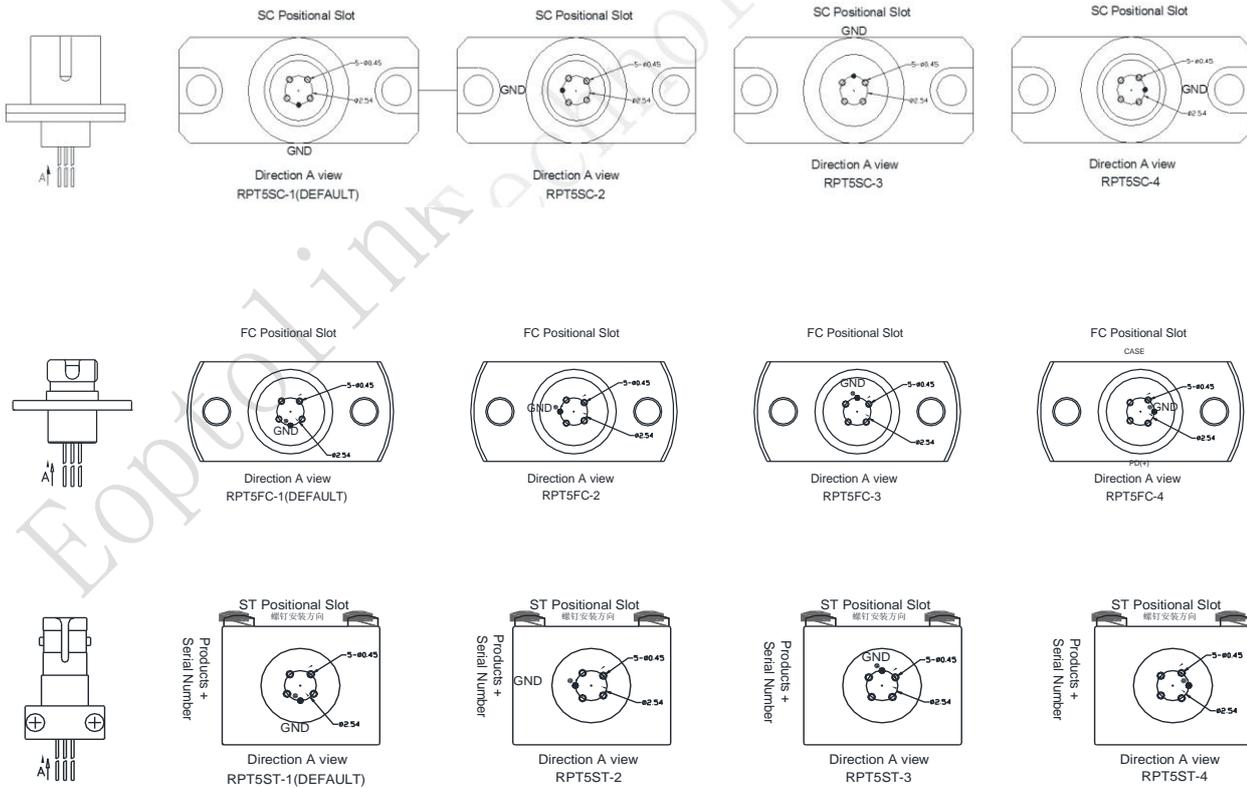
Note2: Other pin type can be customized.

Receptacle package series *Note3

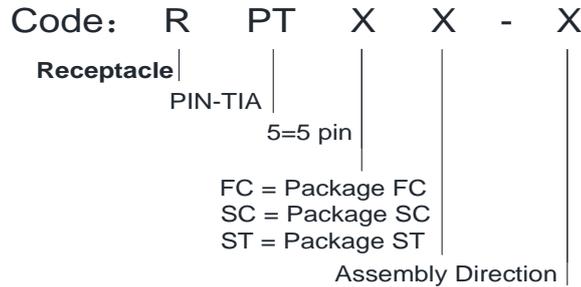


*Note3: For more Receptacle package series, please refer the nomenclature and contact EPOTOLINK sales.

The direction of fix card



Nomenclature of assembly direction ^{*Note4}



*Note4: Please designate the code of assembly direction.

Nomenclature

G P T R—

A B C D E F

Order	Parameter	Detailed description			
A	Date rate	T=10Gbps			
B	Wavelength	1=1100~1610nm			
C	Voltage	3=3.3V			
D	Pin type	E= pin-E			
E	Package series	A=FC-1	B=FC-4	E=ST-1	F=SC
		P=ST-7	T=ST-5	Y=ST-8	
F	Insulation	Blank=NO insulation		J= Insulation	

Precaution

- (1) The modules should be handled in the same manner as ordinary semiconductor devices to prevent the electro-static damages. For safe keeping and carrying, the modules should be packaged with ESD proof material. To assemble the modules on PCB, the workbench, the soldering iron and the human body should be grounded.
- (2) Please pay special attention to the atmosphere condition because the dew on the module may cause some electrical damages.
- (3) Under such a strong vibration environment as in automobile, the performance and reliability are not guaranteed.

Obtaining Document

You can visit our website:

<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	Approved	Revision record	Release Date
Va-1	Aura.Gong	Zore.zhao Kelly.cao		The initial version	2017-12-22
Va-2	Aura.Gong	Zore.zhao Kelly.cao		bandwidth and mark size update	2018-6-15
Va-3	Yinchun.Zhao	James.liu	Vincent.yu	1、Wavelength From 1270-1610 to 1260-1620 2、 Receptacle package series Delete H, add P,	2020.4.15

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