3G PIN-TIA Receiver Modules

HEPTR-A13EX

Features:

- High sensitivity
- Differential ended output
- Single +3V operation
- Trans-impedance amplifier with AGC
- RoHS Compliant products available

Applications:

- 3G Bit Rate application
- Fast Ethernet receiver/transceiver application

General:

HEPTR-A1XEX Series is a TO-based 3G, 5 pin PIN-TIA. The product is designed for SD-SDI, HD-SDI and 3G-SDI data rates. A photodiode is mounted into a low capacitance coaxial package integrated with a receptacle.

Ordering Information: (Standard version *Note1)

Part No.	Wavelength (nm)	Voltage (V)	Package	Pin Type	Insulation
HEPTR-A13EAJ	1100～1650	3.3	A	D	Y
HEPTR-A13EB	1100～1650	3.3	B	D	N
HEPTR-A13EE	1100～1650	3.3	E	D	N
HEPTR-A13EFJ	1100～1650	3.3	F	D	Y

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

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TEL: +86-28-64570369
E-mail: sales@higheasy-electronics.com http://www. higheasy-electronics.com

Absolute Maximum Ratings:

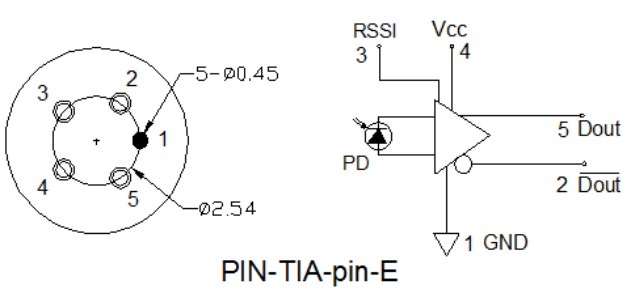
Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	Tstg	-40	100	℃
Operating Temperature	Top	-40	85	℃
Power Supply Voltage	VP	-0.5	4	V
Optical Power	Pin	-	5	dBm
Soldering Temperature / Time		-	260/10	°C/S

Electrical and Optical Characteristics:

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Operating Wavelength	λ	1100	1310	1650	nm	
Supply Voltage	V				V	
Supply Current	Icc		41	52	mA	Vcc=3.3V,P = 0 ┌ W, RL =50┐ └
Optical Power	Psat	-	-	5	dBm	VR=5V,25°C
High Frequency Bandwidth(-3dB)	BW	2.1	3		GHz	RL = 50┐
Low Frequency Bandwidth (-3dB)	BW1			500	kHz	RL = 50
Sensitivity			-	-22	dBm	λ=1310nm,Speed=2.97G PRBS=2^{23}-1, BER=10^{-12}, ER=9-10dB SM fiber
Rise/Fall Time	Tr/Tf		150/150		ps	
Overload Power	Pload┐		0		dBm	PRBS=2^{23}-1, BER=10^{-12}, ER=9-10dB
Output Resistance	Ro		50		Ω	
RSSI Slope		0.9	1.0	1.1	mA/mA	
RSSI Offset		0	25	200	nA	
RSSI Linearity Limit				1.0	mA	

Pin Assignment: *Note2

TYPE: E



PIN-TIA-pin-E

Note2: Other Pin type can be customized.

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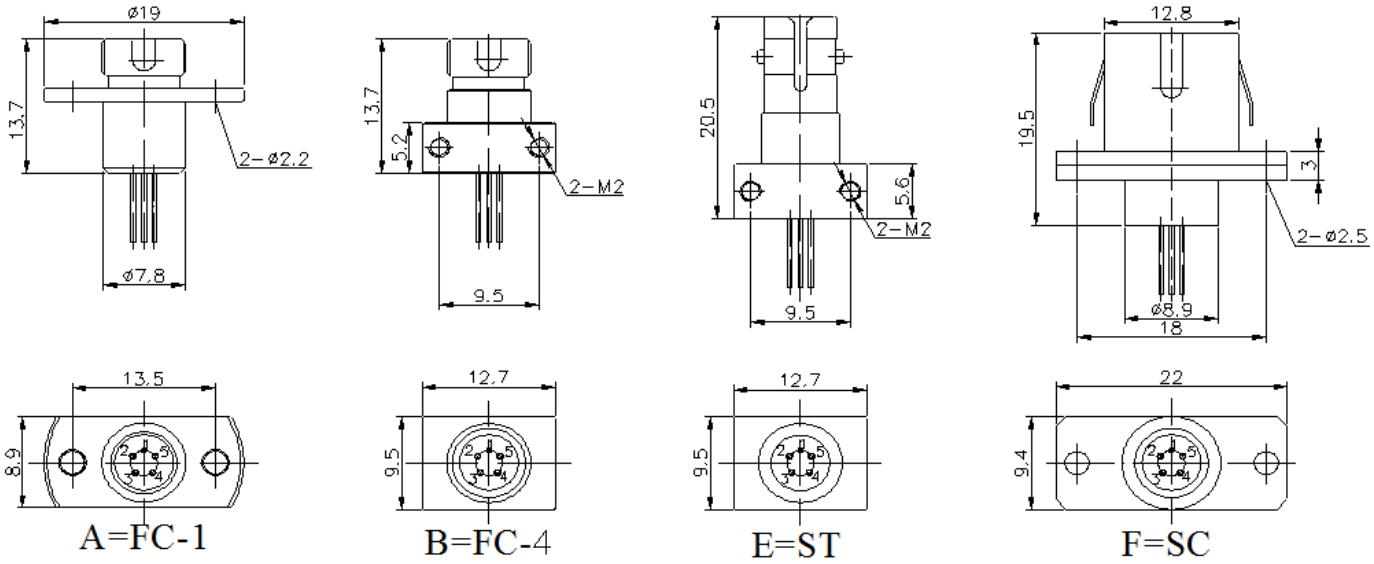
Receptacle Package Series:



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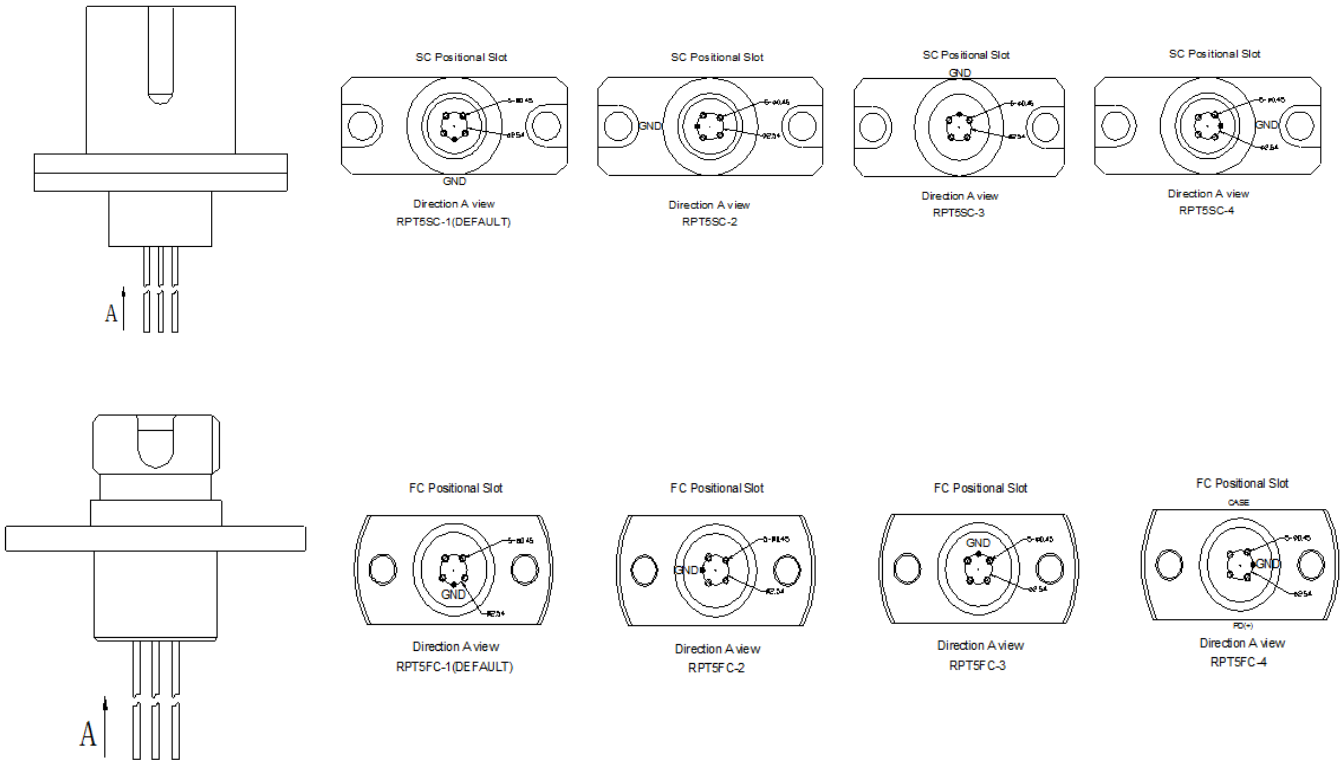

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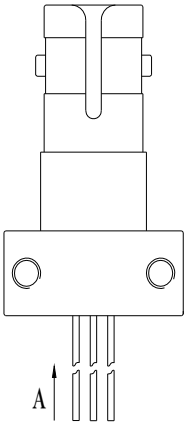

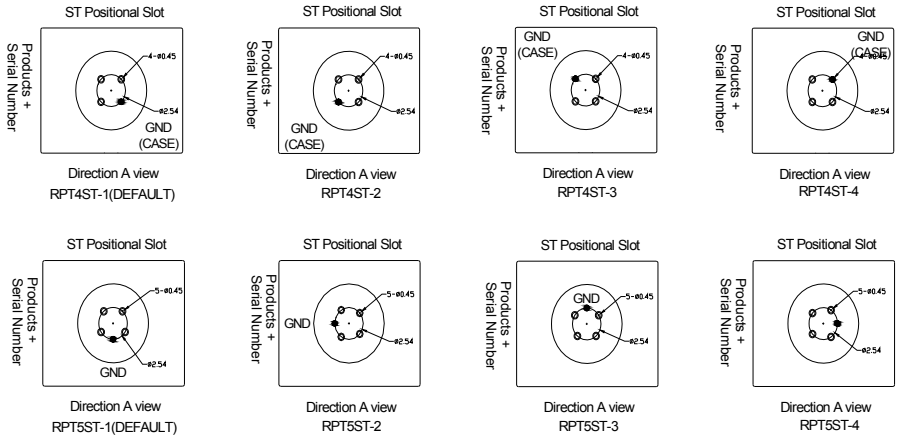

Nomenclature:

HEPTR—□ □ □ □ □ □

A B C D E F

A	**Data Rate**	A=3G			
B	**Wavelength**	1=1100～1650nm			
C	**Voltage**	3=3.3V			
D	**Pin Type**	E= pin-E			
E	**Package Series**	A=FC-1	B=FC-4	E=ST	F=SC
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.

Notice:

HighEasy reserves the right to make changes or discontinue any product or service identified in this publication, without notice, in order to improve design and/or performance. Applications that are described herein for any of the products are for illustrative purposes only. HighEasy makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.

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