

2.5Gbps Connectorized GaAs PIN-TIA Photodiode Receivers

Model No. R85-2G-XYZ-VP

Read Model No.	R85-2G-XYZ-VP
R85 = Receiver	GaAs PIN-TIA photodiode
2G = Data Rate	2.5 Gbps
X = Package	Receptacle (X=R); Pigtail (X=P)
Y = Connector	For Receptacle: FC (Y=FC), ST (Y=ST) For Pigtail: None (Y=NO); FC-PC (Y=FC); SC-PC (Y=SC); ST-PC (Y=ST); LC-PC (Y=LC)
Z = Sensitivity	-18dBm (Z=1), -20dBm (Z=2)
V = Supply voltage	3.3V (V=3)
P = Pin configuration	5-pin (P=5)

Features

- High speed
- High Sensitivity
- Hermetically sealed
- Single power supply +3.3
- Packaged in connector Pigtail or Receptacle

Packaging

- FC/ST receptacle package
- SM fiber pigtailed with optional FC/ST/SC connector

Applications

- SONET OC3, OC-12, OC-48
- SDH STM-1, STM-4, STM-16
- LAN

Specifications

Absolute Maximum Ratings				
Parameters	Symbol	Value	Unit	
Storage temperature	Tstg	-40~+85	°C	
Operating case temperature	Top	-40~+85	°C	
Peak optical power	Po	0	dBm	
Power supply Voltage	Vp	3.6	V	
Soldering temperature	Stemp	260	°C	
Soldering time	Stime	10	sec	

Electro-Optical Characteristics (CW @ T _c = 25°C unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Wavelength	λ	770		860	nm	
Bandwidth	BW	1.4			MHz	Vcc
Low Frequency Cut-off	LF			100	kHz	Vcc
Supply Current	Icc		25	35	mA	Vcc, no load
Sensitivity	S	-18 -20			dBm	λ=850nm, @2488.32Mbps, PRBS23, ER=10dB, BER=1E ⁻¹⁰
Saturation power	Psat	0			dBm	λ=850nm, @2488.32Mbps, PRBS23, ER=10dB, BER=1E ⁻¹⁰
Differential Responsivity	Rd	1.8		3.8	mV/μW	λ=850nm, @2488.32Mbps, PRBS23, ER=10dB, BER=1E ⁻¹⁰
Rise/Fall Time	τ _r /τ _f		170	200	ps	Vcc=3.3V, 20%~80%
Single Ended Impedance	Ro		50		ohm	

Fiber Pigtail Specifications						
Parameters	Symbol	Min.	Typ.	Max.	Unit	
Fiber type		Single Mode Fiber (Flame Retardant Hytrel Coating)				
Cladding diameter	Dcl	122	125	128	um	
Mode field diameter	Dmf	-	10	-	um	
Coating diameter	Dbc	-	0.9	1	mm	
Pigtail length	L	0.9	1.0	1.1	m	
Bending radius	Rb	30	-	-	mm	
Connector		TBD				

Note: Horizontal mount is available upon request and provided separately.

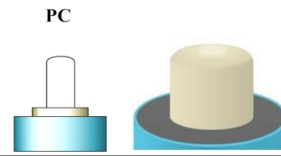
Lasermate Group, Inc.





19608 Camino De Rosa, Walnut, CA 91789, USA

Tel: (909)718-0999 | Fax: (909)718-0998 | E-mail: info@lasermate.com | URL: <http://www.lasermate.com>



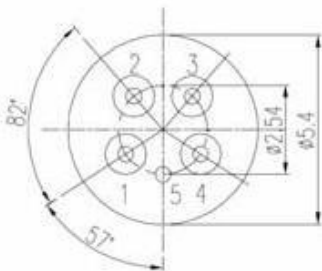
For Pigtail – Optics Fiber Connector Type



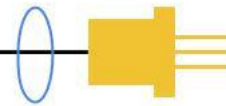
Type	Ferrule Diameter	Multi mode PC	Type	Ferrule Diameter	Multi mode PC
FC	2.5mm		ST	2.5mm	
SC	2.5mm		LC	1.25mm	

Pin Configuration

5-pin:

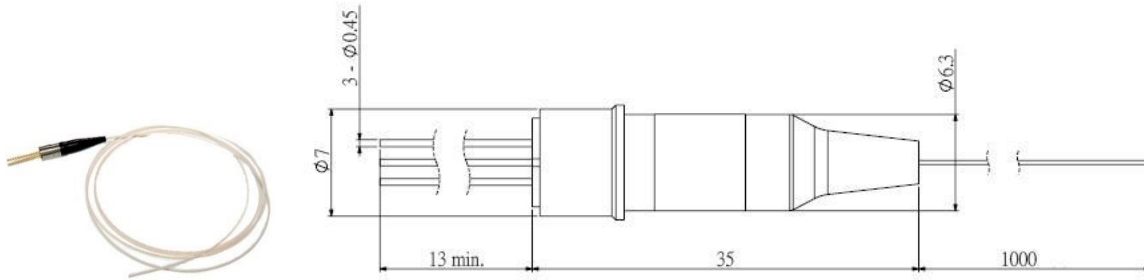


Number	Function
1	Dout +
2	Vcc
3	Isource
4	Dout -
5	GND

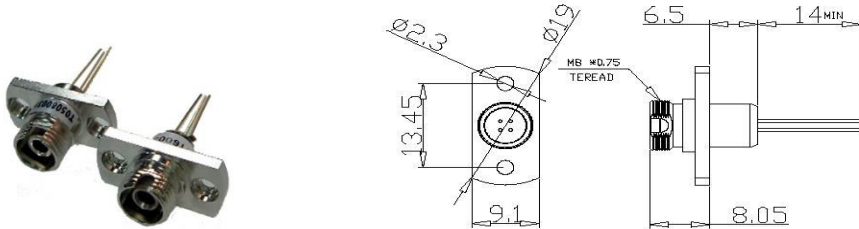


Outline Dimensions (unit: mm)

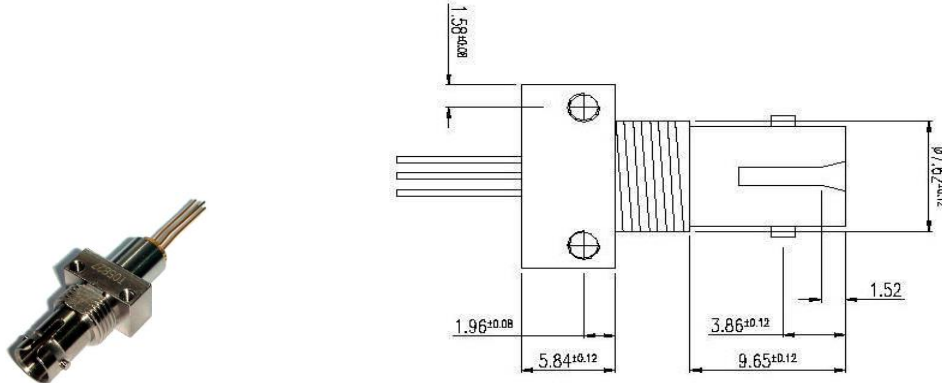
Pigtail



FC Receptacle



ST Receptacle



Note: Specifications are subject to change without notice.