



R85-2G-RYZ-VP

2.5Gbps Receptacle GaAs PIN-TIA Photodiode Receiver Module

Description

The Lasermate R85-2G-RYZ-VP is a 770-860nm wavelength range, GaAs photodiode receiver module integrated with transimpedance amplifier. The devices are available in receptacle style housings with FC or ST connector. The GaAs photodiode ROSA features high sensitivity and high-speed reaching up to 2.5Gbps data rate operation.



Features

- High speed
- High Sensitivity
- Hermetically sealed
- Single power supply +3.3V

Packaging

- FC/ST receptacle package

Applications

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

Ordering Information

Read Model No.	R85-2G-RYZ-VP
R85 = Receiver	GaAs PIN-TIA photodiode
2G = Data Rate	2.5 Gbps
R = Package	Receptacle
Y = Connector	FC (FC), ST (ST)
Z = Sensitivity	-18dBm (1), -20dBm (2)
V = Supply voltage	3.3V (3)
P = Pin configuration	5-pin (5)



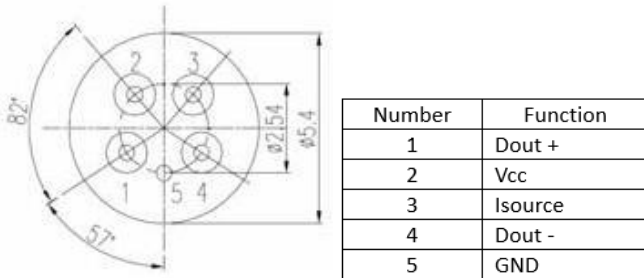
Specifications

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	

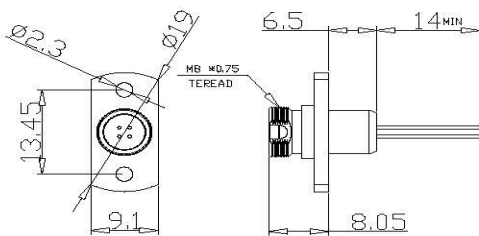
Pin Configuration

5-pin:

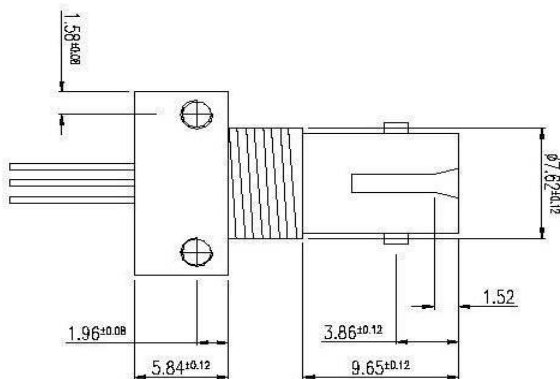


Outline Dimensions (unit: mm)

FC Receptacle



ST Receptacle



Note: Specifications are subject to change without notice.