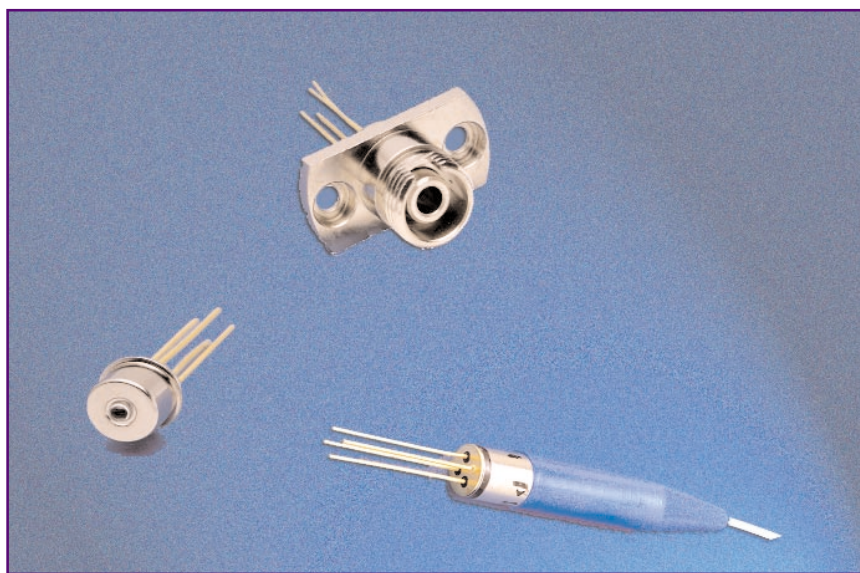




InGaAs PIN Photodiode Receivers SRMB2.5

Fiber-Optic Receiver Modules



Description

The SRMB series incorporates a high-speed InGaAs PIN photodiode with a silicon transimpedance amplifier in a coaxial package for digital communication applications. The SRMB series conforms to Synchronous Optical Network (SONET) requirements for OC-48 (2.5 Gbps) receivers used in 1550 nm long-range, intermediate-range and short-range applications. Receiver modules are available in industry-standard FC or SC receptacles, or in fibered packages with either multi-mode or single-mode pigtail.

Committed to supplying the highest quality products, PerkinElmer Optoelectronics is certified to meet ISO 9001. The SRMB series is designed to satisfy Telcordia quality specification GR-468-CORE. All devices undergo periodic process qualification programs to assure high reliability.

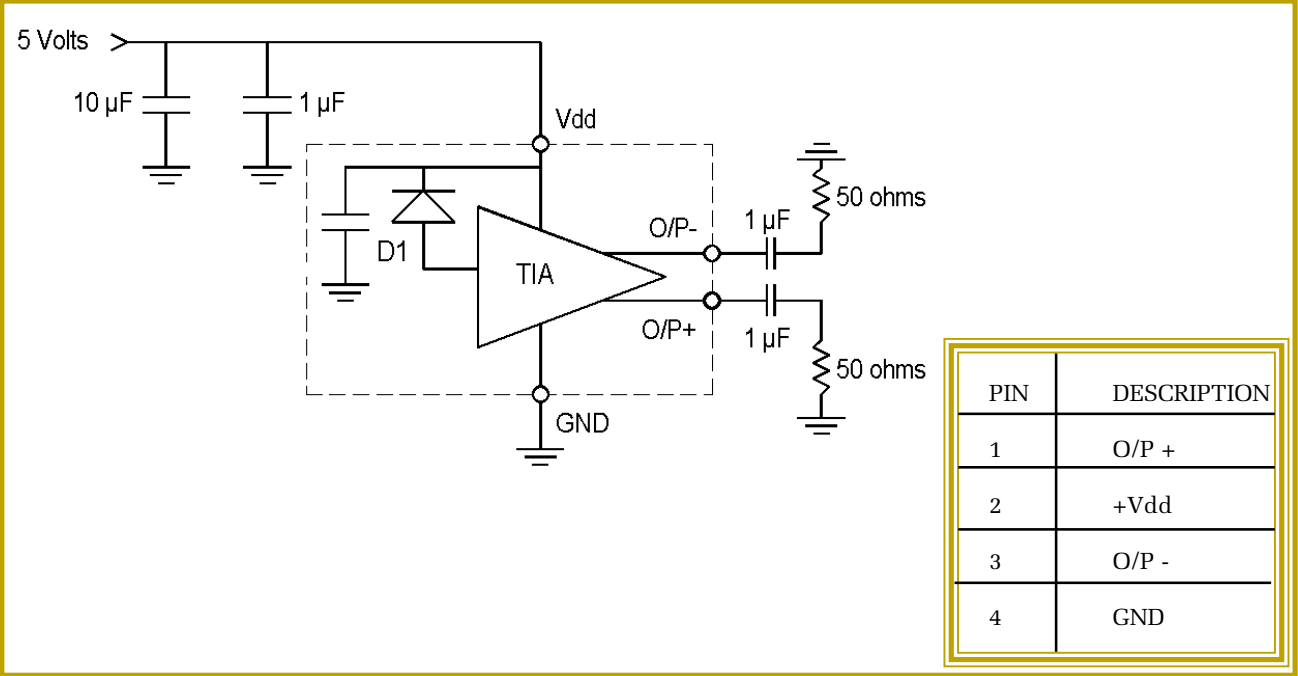
Applications

- SONET transmission equipment
- Fiber channel, Ethernet
- Digital video transmission equipment/CATV

Features

- InGaAs PIN detector
- Low-noise transimpedance amplifier
- 2.5 Gbps
- Fibered and connectorized modules
- High reliability

Typical Connection Circuitry



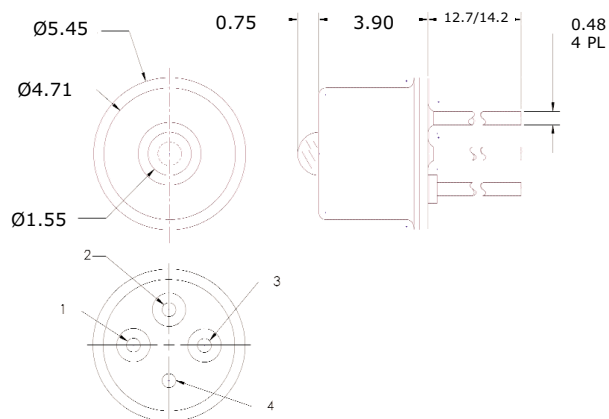
Specifications

Test conditions: T=22° C, V_{dd} = 5 Volts, R_L = 50 Ohms AC. Limits applicable at 22° C (case temperature).

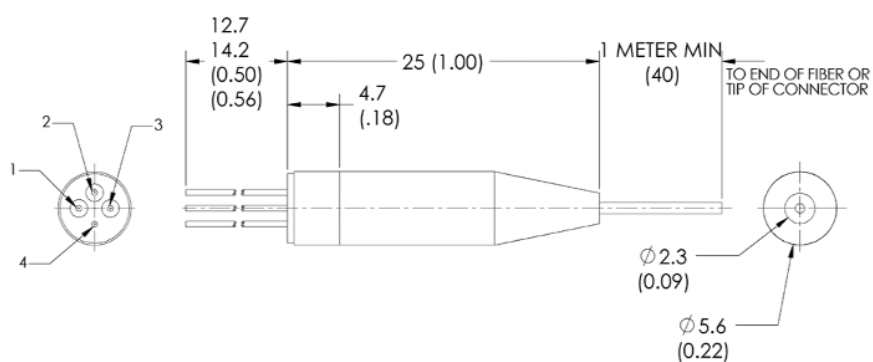
PARAMETER	SRMB2.5			Units
	Min	Typ	Max	
Bandwidth (-3dB, 50 Ohms)	1700	1950		MHz
Responsivity, single-ended (1300 nm)	0.9	1.1		KV/W
Effective transimpedance		1.3		kOhms
Sensitivity (BER=10 ⁻¹⁰)	-24	-25		dBm
Overload	0			dBm
Output offset voltage		4.7		Volts
Output impedance		50		Ohms
TIA supply current		45	65	mA
TIA power dissipation		225	325	mW

Note: Consult PerkinElmer Optoelectronics for typical performance characteristics over the operating temperature range.

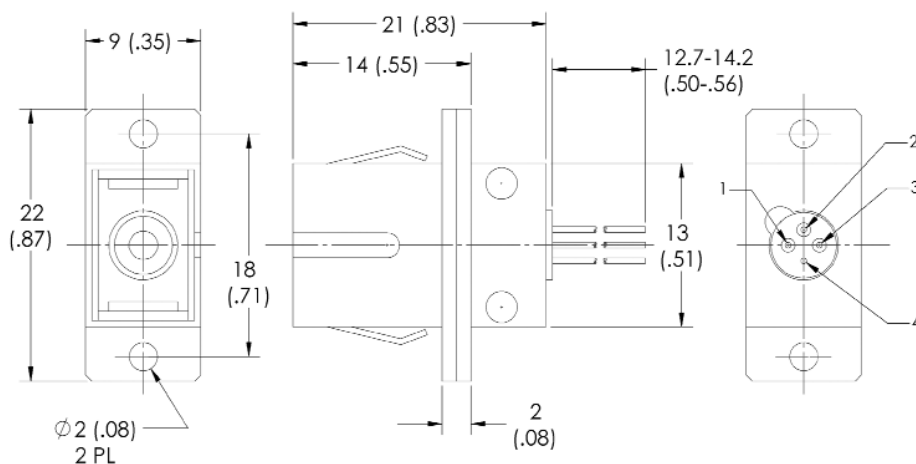
Package Outline



BALL LENS



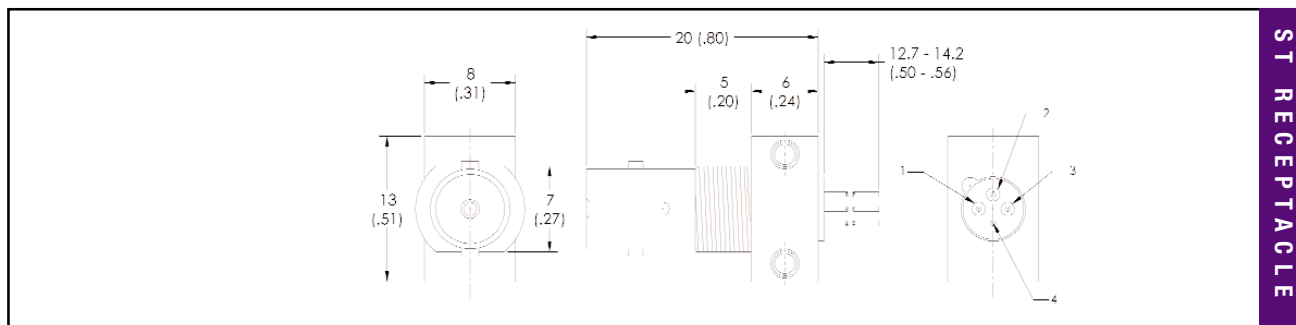
PIGTAIL



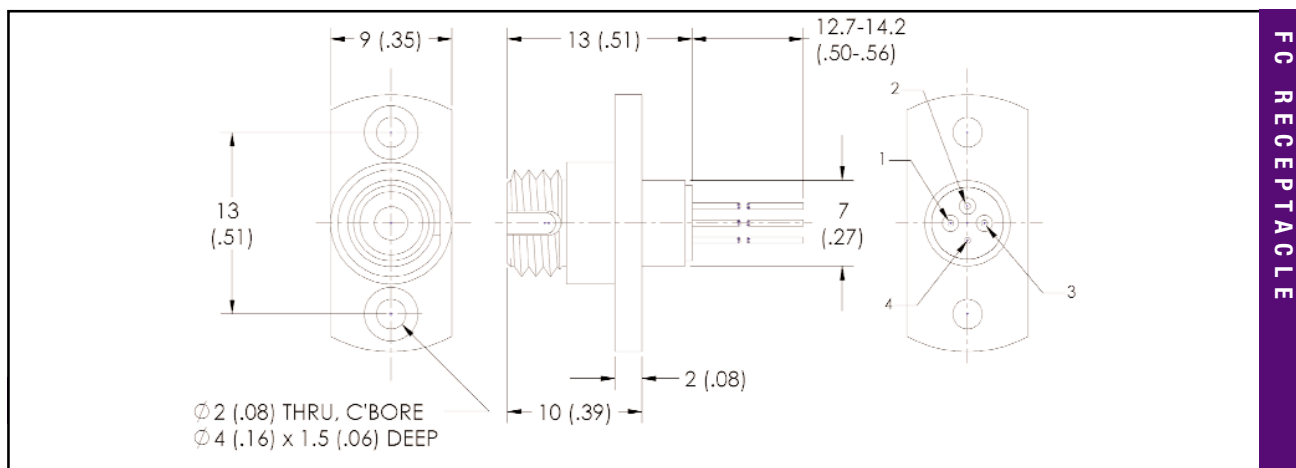
SC RECEPTACLE

SRMB2.5

Package Outline



ST RECEPTACLE



FC RECEPTACLE

Maximum Ratings

Supply Voltage (V_{dd})	7 Volts
Optical power	2 mW
Fiber bend radius	30 mm min.
Operating case temp.	-40/85° C
Storage temperature	-40/85° C

Ordering Guide

Receptacle version	Pigtail version	Ball Lens Only
Generic type: PP SRMB2.5-PP	Generic type: SRMB2.5- FFCC	SRMB2.5
Receptacle type (PP)	Fiber type (FF)	
FC : FC Receptacle SC : SC Receptacle ST : ST Receptacle	09 : 9/125/900 μ m 50 : 50/125/900 μ m 62 : 62.5/125/900 μ m	
	Connector type (CC)	
	FC : FC connector SC : SC connector	

PerkinElmer Optoelectronics reserves the right to change or amend specifications and/or configurations at any time without notice.

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