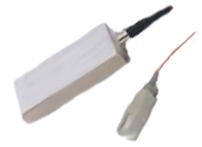


# 1203 APD (Avalanche Photo Diode)

**SRC-48-LR**



## OC-48/STM-16 Receiver with Clock Recovery

The SRC-48-LR modules are receivers designed to meet or exceed the SONET/SDH optical interface requirements at OC-48/STM-16 (2.488 Gb/s) data rate. This Long Reach (LR) version uses InGaAs avalanche photodiodes (APDs) to achieve high sensitivity. The long reach receiver features a low noise GaAs transimpedance IC with AGC capability to provide an extremely wide dynamic range.

### FEATURES

- Fully Compliant with SONET/SDH OC-48/STM-16 (2.5 Gb/s) Specifications
- Long Reach 1310 nm & 1550 nm as well as Intermediate Reach and Short Reach
- Internal Temperature-compensated High Voltage APD Supply (Long Reach Version)
- -40 °C to +85 °C Operating Temperature (Intermediate Reach and Short Reach)
- 24-pin DIP Metal Package
- FC, ST, SC-connectorized Fiber Pigtails
- Differential DATA & CLOCK Interface
- TTL SIGNAL DETECT Output
- Received Optical Power Monitor Function
- Single +5 V Supply

### FUNCTIONAL DIAGRAM

Pin#	Desc
1	NC(No Connection)
2	GND
3	PM (optical Power Monitor)
4	GND
5	DATA OUTPUT -
6	DATA OUTPUT +
7	GND
8	GND
9	CLK - (CLOCK OUTPUT -)
10	CLK+ (CLOCK OUTPUT +)
11	GND
12	GND

Pin#	Desc
24	VCCA (VCC ANALOG)
23	VCCA (VCC ANALOG)
22	SD - (SIGNAL DETECT -)
21	SD + (SIGNAL DETECT+)
20	GND
19	GND
18	GND
	GND
17	Case Ground
16	VCCD (VCC DIGITAL)
15	VCCD (VCC DIGITAL)
14	VCCD (VCC DIGITAL)
13	VCCD (VCC DIGITAL)

**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.

**1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.**

**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**

# 1203 APD (Avalanche Photo Diode)

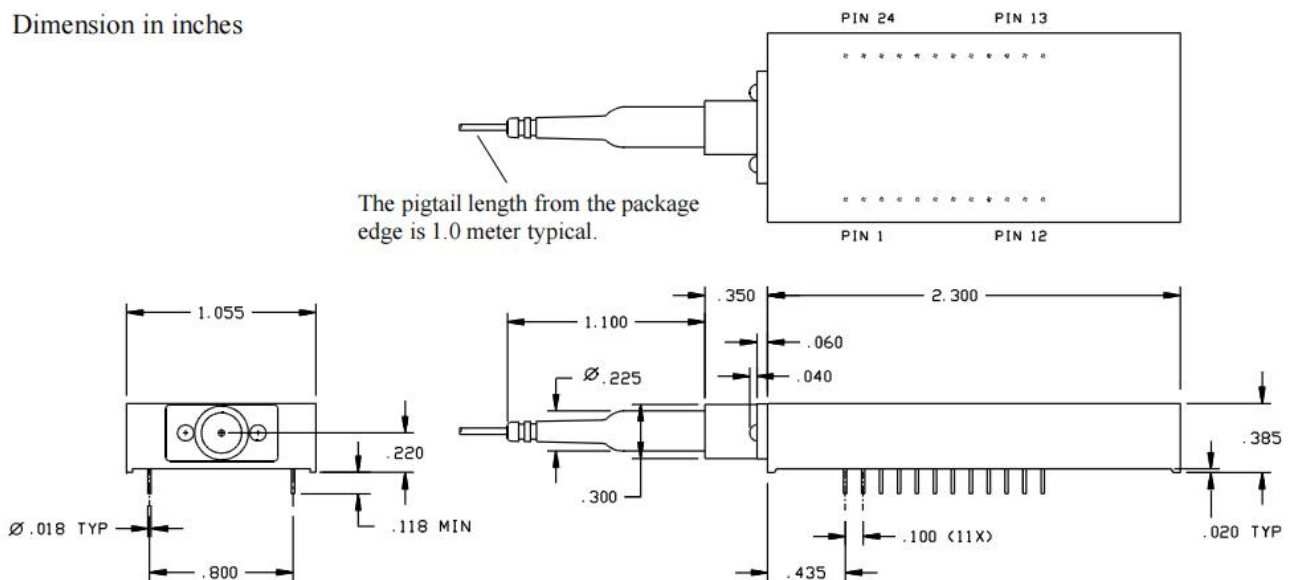
**SRC-48-LR**



Receiver Configuration	InGaAs APD+Pre-amp
Spectral Response Range	1100 nm to 1600 nm
Sensitivity	-32 dBm typ. @10e-10 BER
Output Voltage	2.7 V to VCC (High); 0 to 0.7 V (Low)
Maximum Optical Input Power	-6 dBm min.
Output Coupling	Differential, Double-ended, 50 Ohm
Optical Return Loss	n/a
Package Type	24-pin Dual Inline (DIL)
Dimensions	60(L)x50(W)x9(H) mm
Fiber Type	SM Fiber
RF Connector	Differential, Double-ended, 50 Ohm
Operation Temperature Range	-40°C to +85°C

## MECHANICAL DRAWING

Dimension in inches



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