

Product Description

Neton's 2418TZ Receiver optical fiber devices, combined with 1414XX and 850nm multi-mode optical fiber, provide high performance and low cost optical fiber communication links for industrial, power generation, medical, transportation, and game applications. The 1414XX is driven by 60 mA current with a minimum transmission distance of 2000 meters.

The 2418 TZ Series supports industrial standard ST fiber ports with threaded options. 2418 For a variety of fiber core diameter, including 50/125 μ m, 62.5/125 μ m, 100 / 140 μ m and 200 μ m.

The 2418 TZ series consists of a high-gain span resistance amplifier with an integrated photodiode and delivers a CMOS / TTL logic output, providing a power monitoring function (RSSI). To improve the stability of the output pulse width of the receiver, the receiver chip has designed the automatic artery width calibration circuit with the pulse width distortion within ± 5 ns.

Order information

Type	Fiber type	wavelength (nm)	interface type
2418TZ	MM	850	Receive, ST with thread



Product Features

- Data transfer rate: DC-50 MBd
- Minimum transmission distance: 2000 m
- The output waveform pulse width is stable
- Provides the RSSI monitoring
- Compliance the RoHS criteria
- Power supply support is + 3.3V or + 5V
- ST connector with thread
- Operating temperature range (Industrial: -40°C to +85°C)

DC-50MBd Receiver Module

2418TZ

Application

- Factory automation
- Industrial networks and the fieldbus
- Audio and video applications / game applications

Absolute Maximum Ratings

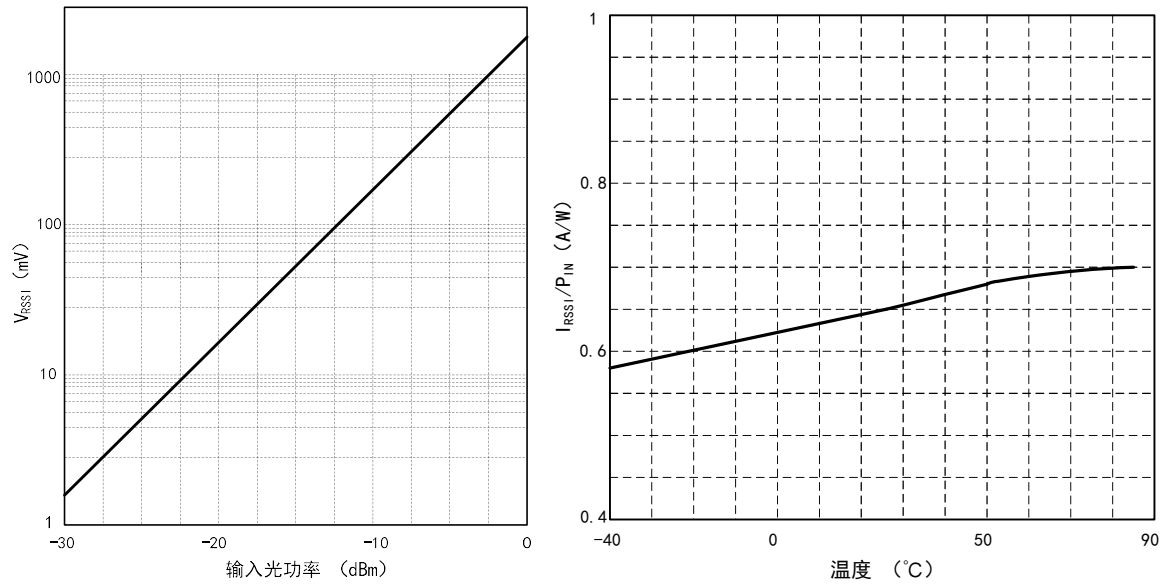
Table 1--- Absolute Maximum Conditions

Parameter	Symbol	Min	Max	Units	Note
Storage Temperature	Ts	-55	+85	°C	-
Operating Temperature	Ta	-40	+85	°C	-
supply voltage	VCC	-0.5	5.5	V	-
Maximum DC output current	IO	-	10	mA	-
Soldering temperature(electric-soldering-iron)	-	-	350	°C	-
Soldering duration(electric-soldering-iron)	-	-	5	Sec	-

Table 2--- 2418TZ Receiver Optical Characteristics

(Ambient Operating Temperature Ta=+25±5°C, VCC = 3.3±0.2V or 5.0±0.2V)

parameter	Symbol	Min	Typ	Max	Units	Note
Peak wavelength	λ	-	850	-	nm	
Data rate	DR	DC	-	50	MBd	
Receiver Sensitivity	PRL	-24	-	+2	dBm	DR=50MBd
Supply Current	IOH	-	20	30	m A	
Output Voltage – High	VO H	2.4	-	VCC	V	RL=2kΩ
Output Voltage – Low	VOL	-	0.2	0.4	V	RL=2kΩ
Output rise time	TR	-	-	5	ns	CL=10pF
Output drop time	TF	-	-	5	ns	CL=10pF
Duty cycle deviation	PWD	-5	-	5	ns	
RSSI output responsiveness	I _{RSSI} /P _{IN}	-	0.65	-	A/W	
RSSI port voltage	V _{RSSI}	0	-	VCC-1	V	

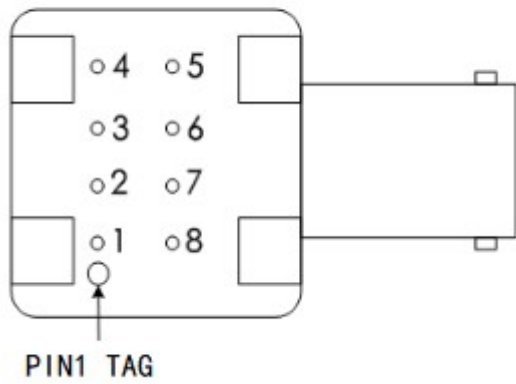


RSSI output port voltage with input light power relationship RSSI responsiveness with temperature

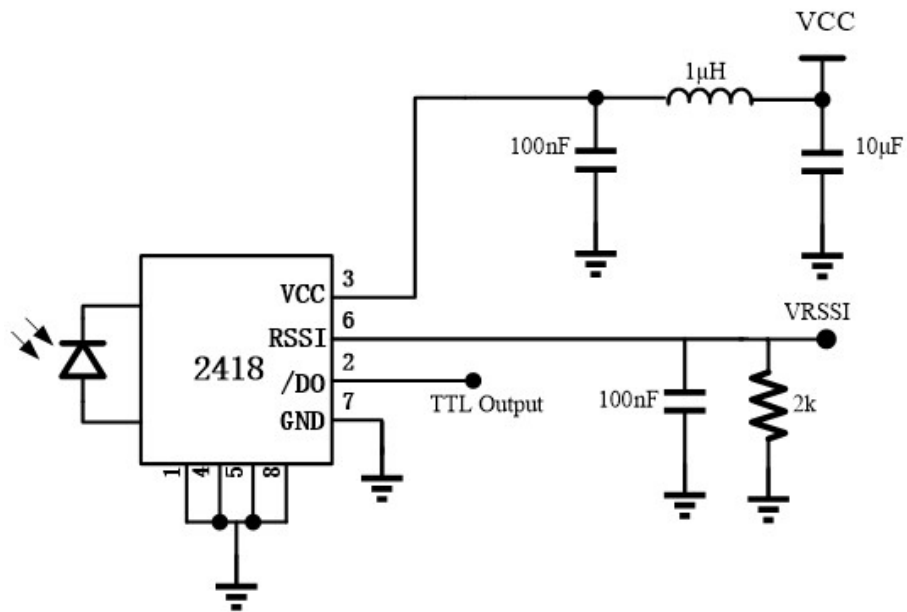
Receiver Pin Definitions

Pin #	Pin Name	Description
1	NC	NC
2	/D O	Reverse output
3	V CC	power supply
4	NC	NC
5	NC	NC
6	RSSI	RSSI monitoring
7	GND	Ground
8	NC	NC

Bottom VIEW



Typical application diagram



Outline dimension drawing of ST interface with thread (2418 TZ) unit: mm

