

# RADWIN

## Multimode SFP 1Gbps 850nm 550m

### Data Sheet



RW-9923-0021



### Product Description

- » 1Gbps SFP transceiver for multi-mode fiber
- » Compatible with all RADWIN products equipped with 1Gbps SFP interface such as: JET DUO, MultiSector, TBS, SmartNode, IDU-S, IDU-H
- » 850nm VCSEL laser, PIN photodetector
- » Maximum link length 500m on MM 50/125 fiber

### Product Highlights

- » Duplex LC fiber connector
- » Optical interface compliant with IEEE 802.3z 1000Base-SX
- » Supports SFF-8472 diagnostics monitoring
- » Industrial operational conditions -40°C to 85°C
- » Hot Pluggable
- » Low power consumption
- » All metal housing for superior EMI performance
- » Satisfies Class 1 laser Safety requirements

## Product Specifications:

Operating parameters			
Parameter	Min.	Typical	Max.
Power supply voltage (Vcc)	3.13V	3.3V	3.47V
Absolute maximum power supply voltage (Max VCC)	-	-	4.5V
Case temperature (Tc)	-40°C	-	85°C
Storage temperature (Ts)	-40°C	-	85°C
Operating humidity (RH)	5%	-	85%
Power supply current (Icc)	-	-	300mA

## Optical and Electrical Characteristics:

The characteristics in the table below are defined over the recommended operating environment unless otherwise specified

Transmitter				
Parameter	Min	Typical	Max	Notes
Centre Wavelength ( $\lambda_c$ )	830nm	850nm	860nm	
Spectral width (RMS) ( $\Delta\lambda$ )	-	-	0.85nm	
Average Optical Power (Pout)	-9.5dBm	-	-3.5dBm	1
Extinction Ratio (ER)	9dB	-	-	
Optical Rise and Fall Time 20% ~ 80 % (tr/ta)	-	-	0.26ns	

Receiver				
Parameter	Min	Typical	Max	Notes
Centre Wavelength ( $\lambda_c$ )	770nm	-	860nm	
Receiver sensitivity	-	-	-18dBm	2
Receiver overload	0dBm	-	-	2
LOS De-Assert (LOS <sub>D</sub> )	-	-	-18dBm	
LOS Assert (LOSA)	-35dBm	-	-	
LOS Hysteresis	1dB	-	4dB	

NOTE:

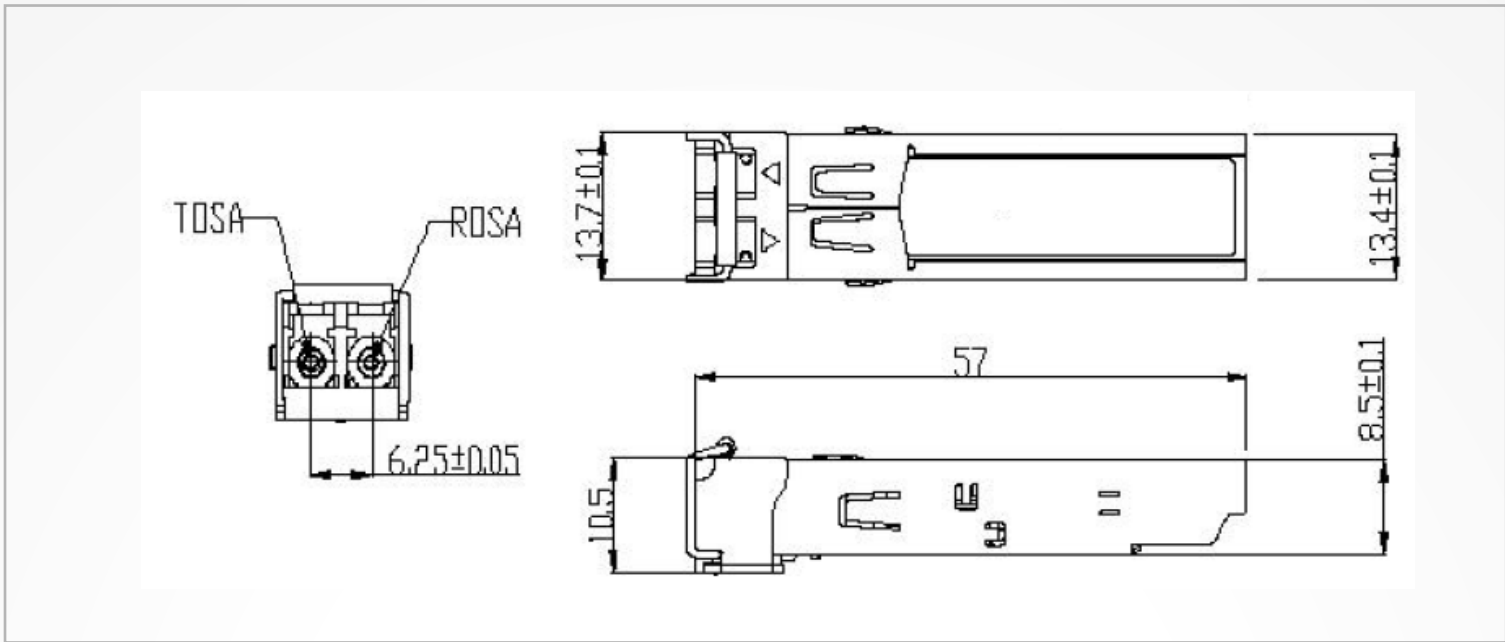
1. The optical power is launched into MMF
2. Measured with a PRBS 2<sup>7</sup>-1 test pattern @1250Mbps, BER  $\leq 1 \times 10^{-12}$

## Regulatory compliance:

This SFP transceiver is designed to be Class I Laser safety compliant and also complies with:

Environmental protection	RoHS Directive 2002/95/EC
EMC	EN 55022:2006+A1:2007, EN 55024:1998+A1:2001+A2:2003
Laser Safety	CDRH 21 CFR 1040 and Laser Notice No. 50, designed to be Class I compliant
Product Safety	EN 60825-1:2007, EN 60825-2:2004, EN 60950-1:2006

### Mechanical specifications:



Datasheet information can be changed by manufacturer without prior notice