WTS10SRD-S30C

10G SFP+ Transceiver 850nm MMF 300m LC

Part Number WTS10SRD-S30C	**Data Rate 10.3125**	**Wavelength 850**
Temperature 0℃~70℃		



1. Product Overview

Features

- Up to 10.3125Gbps Data Links
- 850nm VCSEL laser transmitter and PIN/TIA receiver
- Maximum link length of 300m on 50/125um MMF OM3
- Hot-pluggable SFP footprint
- Duplex LC receptacles
- Low power dissipation
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitor interface
- Single +3.3V power supply
- Compliant with SFF-8472
- Case operating temperature
- Commercial: 0°C to +70°C

Applications

- 10GBASE-SR/SW Ethernet
- 1Gb/s,2Gb/s,4Gb/s,8Gb/s and 10Gb/s Fibre Channel
- CPRI Rates 10.138 Gb/s, 9.830 Gb/s
- 7.373 Gb/s, 6.144 Gb/s, 4.915 Gb/s
- 2.458 Gb/s, 1.229 Gb/s, 0.614 Gb/s
- Other Optical Links

2. Ordering Information

Part No.	Bit Rate (Gbps)	Laser (nm)	Distance（m）	Fiber Type	DDMI	Connector	Temp
WTS10SRD-S30C	10.3125	850	300	MMF	YES	LC	0℃~70℃

3. Absolute Maximum Ratings

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Maximum Supply Voltage	Vcc	-0.5		3.6	V	
Storage Temperature	TS	-40		85	℃	

4. Recommended Operating Conditions

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Case Operating Temperature	TOP	0		70	°C	Commercial
Relative Humidity	RH	0		85	%	1

5. Optical Parameters

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
Center Wavelength	λc	840	850	860	nm	
Spectral Width (RMS)	Pm			0.85	nm	
Average Output Power	Pavg	-7.8		-1	dBm	
Extinction Ratio	ER	3			dB	
Transmitter OFF Output Power	POff			-30	dBm	
Receiver	Receiver	Receiver	Receiver	Receiver	Receiver	Receiver
Center Wavelength	λc	840		860	nm	
Receiver Sensitivity, Average Power				-11.1	dBm	1
Receiver Saturation Power	Psat			-1	dBm	
Loss of Signal Assert	PA	-30			dBm	
Loss of Signal De-assert	PD			-13	dBm	
LOS Hysteresis	PD- PA	0.5			dB	

6. Electrical Characteristics

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Supply Voltage	Vcc	3.135	3.3	3.465	V	
Supply Current	Icc			300	mA	
Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
Input differential impedance	Rin		100			1
Differential data input swing	Vin, pp	200		1000	mV	
Transmit Disable Voltage	VD	2		VCC	V	
Transmit Enable Voltage	VEN	Vee		Vee+0.8	V	
Receiver	Receiver	Receiver	Receiver	Receiver	Receiver	Receiver
Differential data output swing	Vout, pp	200		1000	mV	2
LOS Fault	VLOS_fault	2		Vcc	V	3
LOS Normal	VLOS_norm	Vee		Vee+0.8	V	3
Power Supply Noise Tolerance	VCCT/VCCR	Per SFP MSA	Per SFP MSA	Per SFP MSA	mVpp	

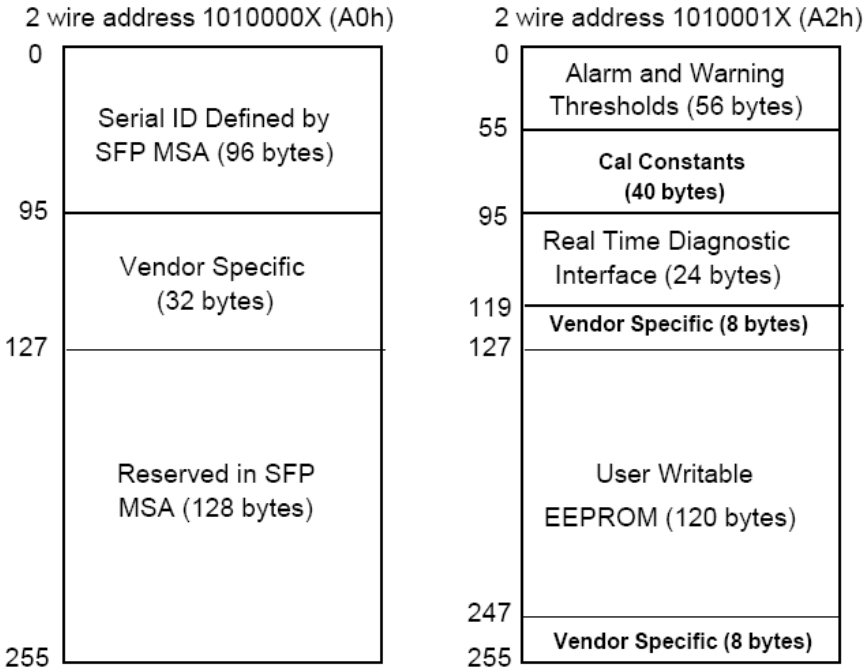
7. Digital Diagnostics

Parameter	Unit	Accuracy
Case Temperature	℃	±3
Supply Voltage	V	±3%
Tx Bias Current	mA	±10%
Tx Optical Power	dB	±3
Rx Optical Power	dB	±3

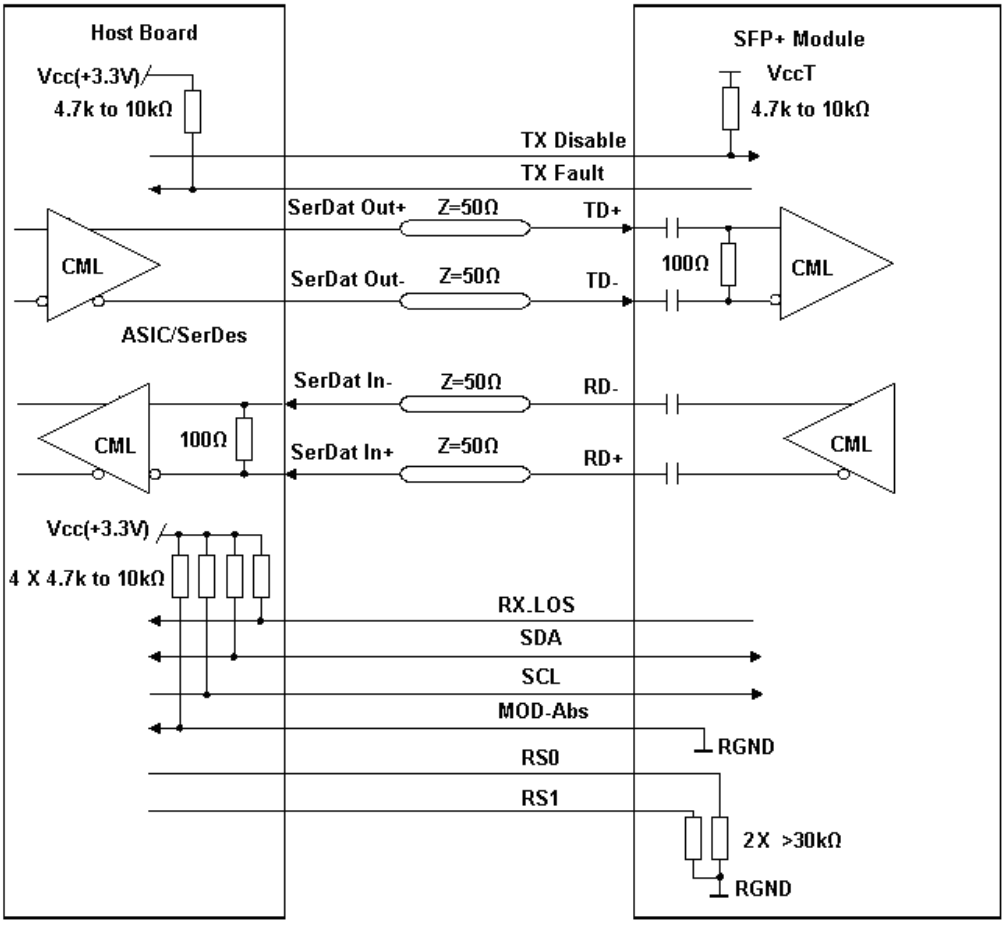
8. Pin Descriptions

Pin	Symbol	Name/Description	Ref.
1	VEET	Transmitter Ground (Common with Receiver Ground)	1
2	TFAULT	Transmitter Fault.	2
3	TDIS	Transmitter Disable. Laser output disabled on high or open.	3
4	SDA	2-wire Serial Interface Data Line	4
5	SCL	2-wire Serial Interface Clock Line	4
6	MOD_ABS	Module Absent. Grounded within the module	4
7	RS0	No connection required	
8	LOS	Loss of Signal indication. Logic “0” indicates normal operation.	5
9	RS1	No connection required	
10	VEER	Receiver Ground (Common with Transmitter Ground)	1
11	VEER	Receiver Ground (Common with Transmitter Ground)	1
12	RD-	Receiver Inverted DATA out. AC Coupled	
13	RD+	Receiver Non-inverted DATA out. AC Coupled	
14	VEER	Receiver Ground (Common with Transmitter Ground)	1
15	VCCR	Receiver Power Supply	
16	VCCT	Transmitter Power Supply	
17	VEET	Transmitter Ground (Common with Receiver Ground)	1
18	TD+	Transmitter Non-Inverted DATA in. AC Coupled.	
19	TD-	Transmitter Inverted DATA in. AC Coupled.	
20	VEET	Transmitter Ground (Common with Receiver Ground)	1

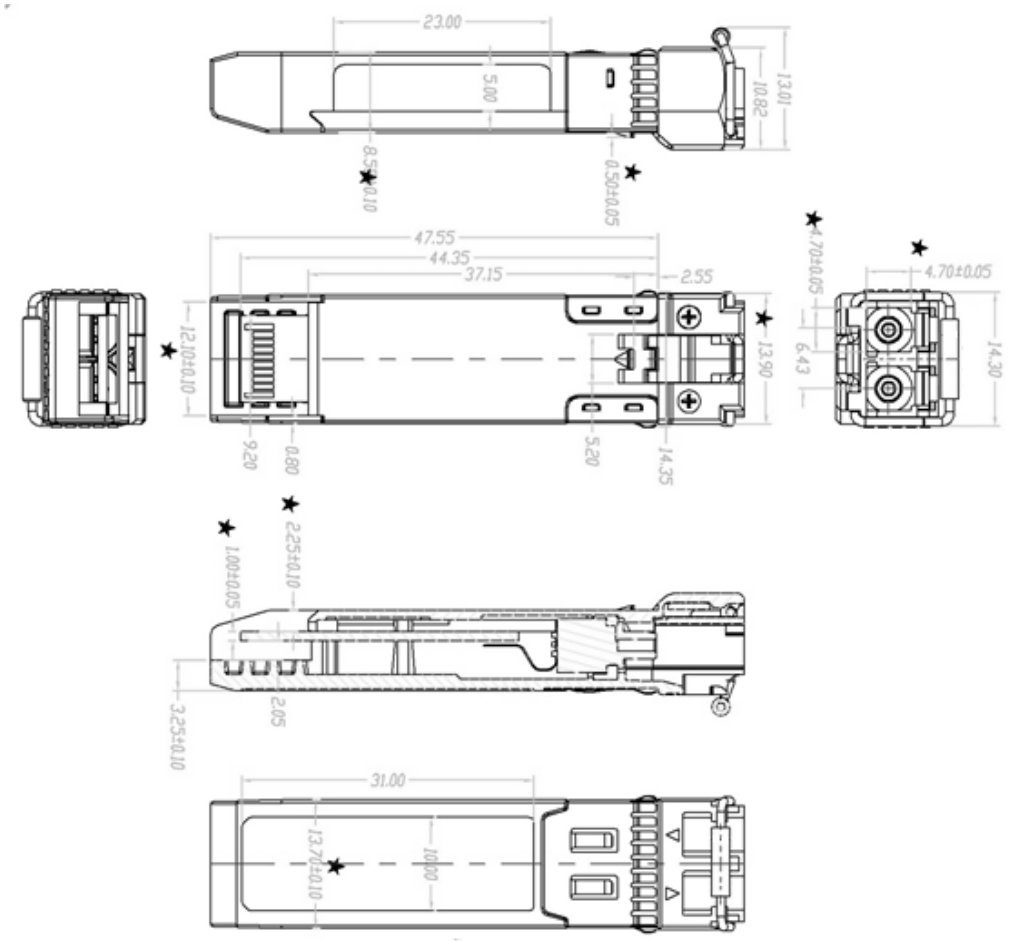
9. Digital Diagnostics Memory Map



10. Recommended Interface Circuit



11. Mechanical Specifications



12. Revision History

Version	Date	Description	Prepared by
V6	2025	Unified WincoTek datasheet format	WincoTek
V6.1	2026-10-23	Engineering and format review	WincoTek