WTS25SRC

25G SFP28 Transceiver 850nm MMF 100m LC

Part Number **WTS25SRC**	**Data Rate 25.78125**	**Wavelength 850**
Reach 70M **OM3/100M OM4**	**Temperature** **0℃~+70℃**	



1. Product Overview

Features

- Up to 25.7813Gbps Data Links
- 850nm VCSEL laser transmitter and PIN receiver
- Maximum link length of 70m on OM3
- Multimode Fiber (MMF) and 100m on OM4 MMF
- Hot-pluggable SFP28 footprint
- Duplex LC receptacles
- Low power dissipation
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitor interface
- Single +3.3V power supply
- 0°C to +70°C case operating temperature

Applications

- 25GBASE-SR Ethernet

2. Ordering Information

Part No.	Bit Rate (Gbps)	Laser (nm)	Distance（m）	Fiber Type	DDMI	Connector	Temp
WTS25SRC	25.78125	850	70M OM3/100M OM4	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	℃	1
Relative Humidity	RH	0		85	%	2

4. Recommended Operating Conditions

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Case Operating Temperature	TOP	0		70	℃	

5. Optical Parameters

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
Center Wavelength	λc	840	850	860	nm	
RMS Spectral Width	Pm			0.6	nm	
Average Output Power	Pavg	-8.4		2.4	dBm	
Optical Modulation Amplitude (OMA)	Poma	-6.4		3	dBm	
Extinction Ratio	ER	2			dB	
Transmitter Dispersion Penalty	TDEC			4.3	dB	
Optical Return Loss Tolerance	TOL			12	dB	
Transmitter OFF Output Power	POff			-30	dBm	
Transmitter eye mask definition {X1, X2, X3, Y1, Y2, Y3}, Hit ratio 1.5E-3		{0.3, 0.38, 0.45, 0.35, 0.41, 0.5}	{0.3, 0.38, 0.45, 0.35, 0.41, 0.5}	{0.3, 0.38, 0.45, 0.35, 0.41, 0.5}		
Receiver	Receiver	Receiver	Receiver	Receiver	Receiver	Receiver
Center Wavelength	λc	840	850	860	nm	
Receiver Stress Sensitivity, OMA				-5.2	dBm	
Receiver Sensitivity, Average Power				-10.3	dBm	1
Receiver Sensitivity, Average Power				-5.2	dBm	2
Receiver Reflectance	Rfl			-26	dB	
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

Parameter	Symbol	Min	Type	Max	Unit	Ref.
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 SFF-8431 Rev 4.1	Per SFF-8431 Rev 4.1	Per SFF-8431 Rev 4.1	mVpp	

7. Digital Diagnostics

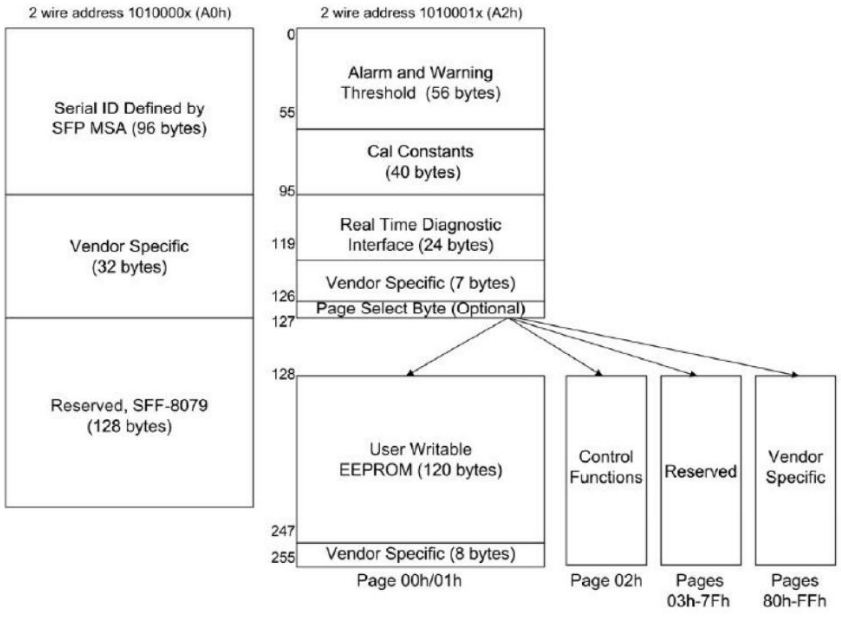
Parameter	Unit	Accuracy
Case Temperature	℃	±3
Supply Voltage	V	±3%
Tx Bias Current	mA	±10%
Tx Optical Power	dB	±3
Rx Optical Power	dB	±3

8. Pin Descriptions

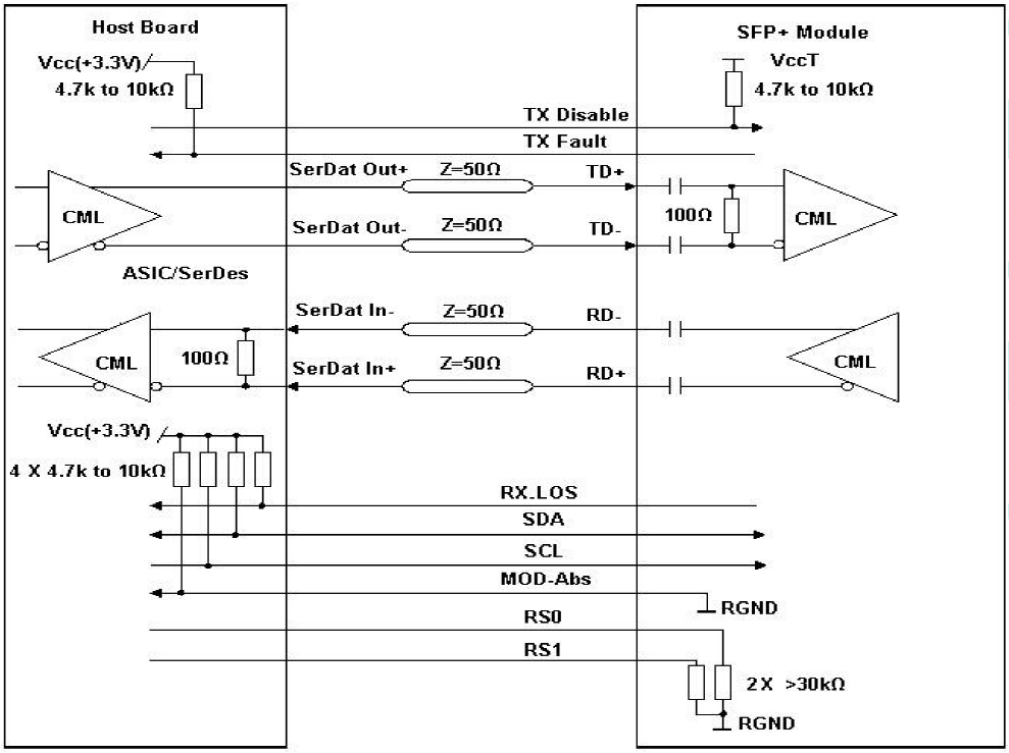
Pin	Symbol	Name/Description	Ref.
1	VEET	Transmitter Ground (Common with Receiver Ground)	1
2	TFAULT	Transmitter Fault.	2
3	TDIS	Transmitter Disable. Laser output disabled on high or open.	3
4	SDA	2-wire Serial Interface Data Line	4
5	SCL	2-wire Serial Interface Clock Line	4
6	MOD_ABS	Module Absent. Grounded 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

Pin	Symbol	Name/Description	Ref.
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

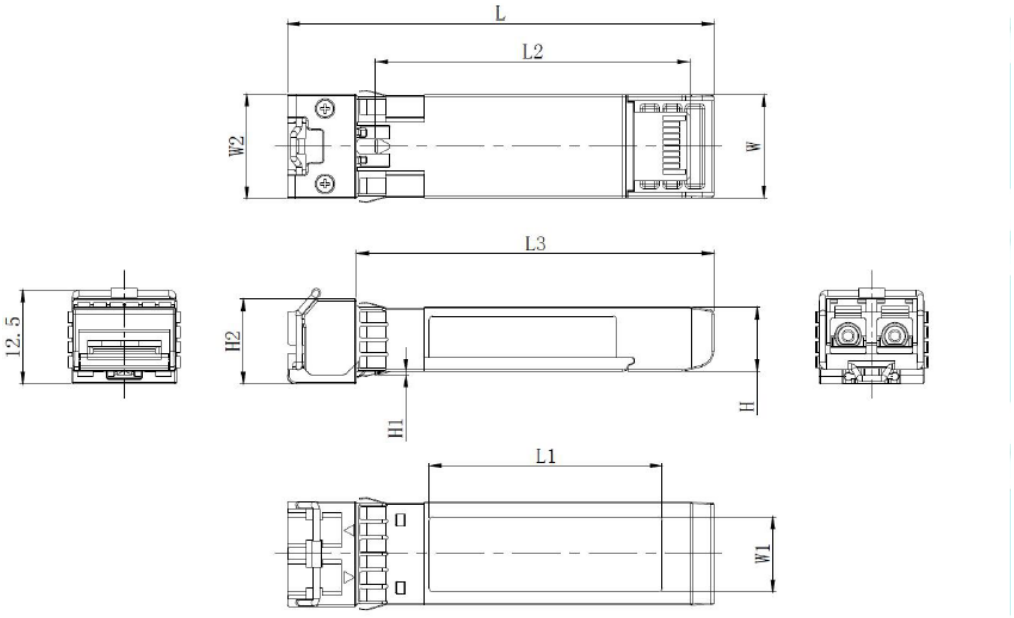
9. Digital Diagnostics Memory Map



10. Recommended Interface Circuit



11. Mechanical Specifications



Unit: mm

	L	L1	L2	L3	W	W1	W2	H	H1	H2
MAX	56.9	31.2	41.95	47.7	13.8	10.2	14.0	8.6	0.6	11.5
Typical	56.7	31.0	41.80	47.5	13.7	10.0	-	8.5	0.5	11.3
MIN	56.5	30.8	41.65	47.3	13.5	9.8	-	8.4	0.4	11.1

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