WTS25CSRC(I)

25G SFP28 Transceiver 1310nm SMF 300m LC

Part Number WTS25CSRC	**Data Rate 25.78125（10.3125）**	**Wavelength 1310**
Temperature 0℃~+70℃		



1. Product Overview

Features

- 25Gbps serial optical interface
- 1310nm DFB transmitter and PIN/TIA receiver
- Supports 25.78Gb/s aggregate bit rate
- 1310nm DFB Laser transmitter and PIN/TIA receiver
- Maximum link length of 300m on
- Single Mode Fiber (SMF)
- Hot-pluggable SFP28 footprint
- Duplex LC receptacles
- Single 3.3V power supply
- Maximum power dissipation < 1.2W
- RoHS-6 compliant and lead-free
- I²C management interface

Applications

- 25GBASE-LR 25G Ethernet
- 10G Ethernet
- CPRI

2. Ordering Information

Part No.	Bit Rate (Gbps)	Laser (nm)	Distance	Fiber Type	DDMI	Connector	Temp
WTS25CSRC	25.78125（10.3125）	1310	300m	SMF	YES	LC	0℃~+70℃
WTS25CSRI	25.78125（10.3125）	1310	300m	SMF	YES	LC	-40℃~+85℃

3. Absolute Maximum Ratings

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Ref.
Relative Humidity	RH	0		85	%	

4. Optical Parameters

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
Signaling rate(range)	Sr		25.7825±100ppm		GBd	
Signaling rate(range)	Sr		10.3125±100ppm		GBd	
Center Wavelength	λc	1295	1310	1325	nm	
Spectral Width(-20dB)	Pm			1	nm	
Average Output Power	Pavg	-7		2	dBm	
Extinction Ratio	ER	3.5			dB	
Side Mode Suppression Ratio	SMSR	30			dB	
Transmitter OFF Output Power	POff			-30	dBm	
Transmitter eye mask definition {X1, X2, X3, Y1, Y2, Y3} Hit ratio 5×10-5 hits per sample.		{0.31, 0.4, 0.45, 0.34, 0.38, 0.4}	{0.31, 0.4, 0.45, 0.34, 0.38, 0.4}	{0.31, 0.4, 0.45, 0.34, 0.38, 0.4}		
Receiver	Receiver	Receiver	Receiver	Receiver	Receiver	Receiver
Signaling rate(range)	Sr		25.7825±100ppm		GBd	
Signaling rate(range)	Sr		10.3125±100ppm		GBd	
Center Wavelength	λc	1295	1310	1325	nm	
Receiver Sensitivity (OMA)				-10.5	dBm	1
Receiver Sensitivity (OMA)				-11	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	

5. Electrical Characteristics

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Supply Voltage	Vcc	3.135	3.3	3.465	V	
Supply Current	Icc			300	mA	Commercial

Parameter	Symbol	Min	Type	Max	Unit	Ref.
Supply Current	Icc			360	mA	Industrial
Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
Input differential impedance	Rin		100			1
Differential data input swing	Vin, pp	100		800	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	100		800	mV	2
LOS Fault	VLOS_fault	2		VccHOST	V	3
LOS Normal	VLOS_norm	Vee		Vee+0.8	V	3

6. Digital Diagnostics

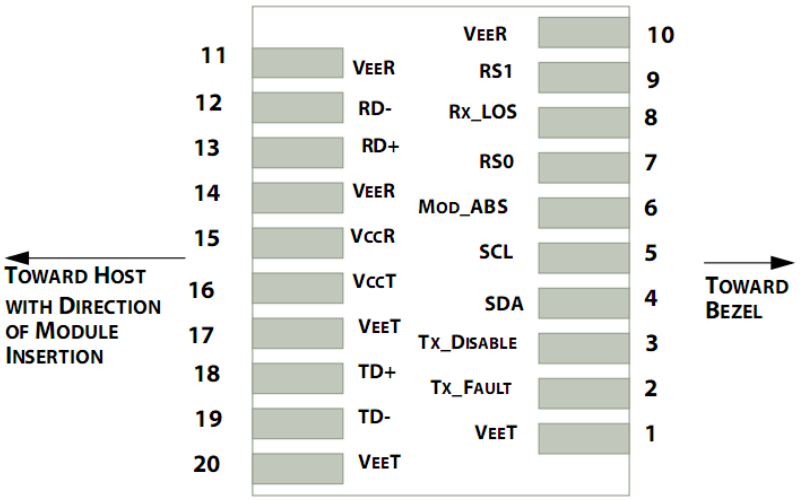
Parameter	Accuracy	Unit
Case Temperature	±3	℃
Supply Voltage	±3%	V
Tx Bias Current	±10%	mA
Tx Optical Power	±3	dB
Rx Optical Power	±3	dB

7. Pin Descriptions

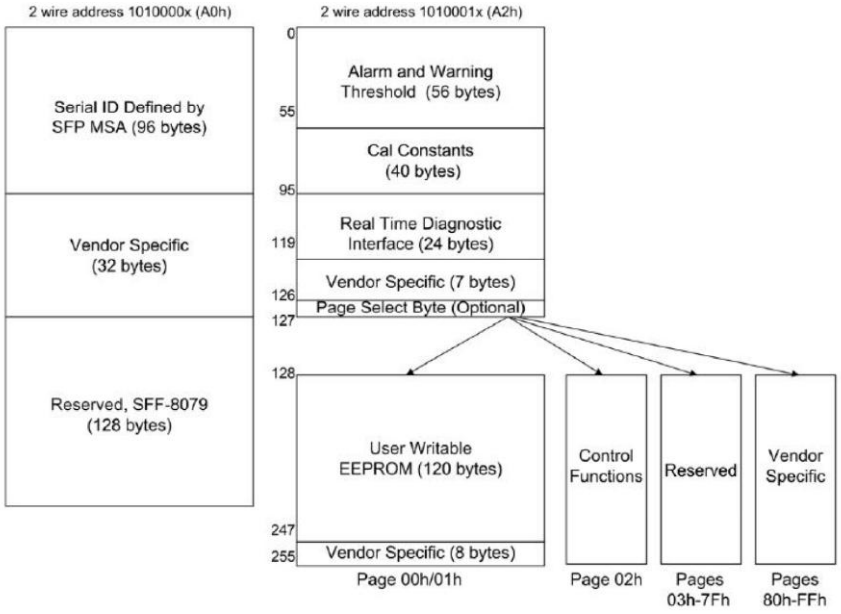
Pin	Symbol	Name/Description	Ref.
1	VEET	Transmitter Ground (Common with Receiver Ground)	1
2	TFAULT	Transmitter Fault.	2
3	TDIS	Transmitter Disable. Laser output disabled on high or open.	3
4	SDA	2-wire Serial Interface Data Line	4
5	SCL	2-wire Serial Interface Clock Line	4
6	MOD_ABS	Module Absent. Grounded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

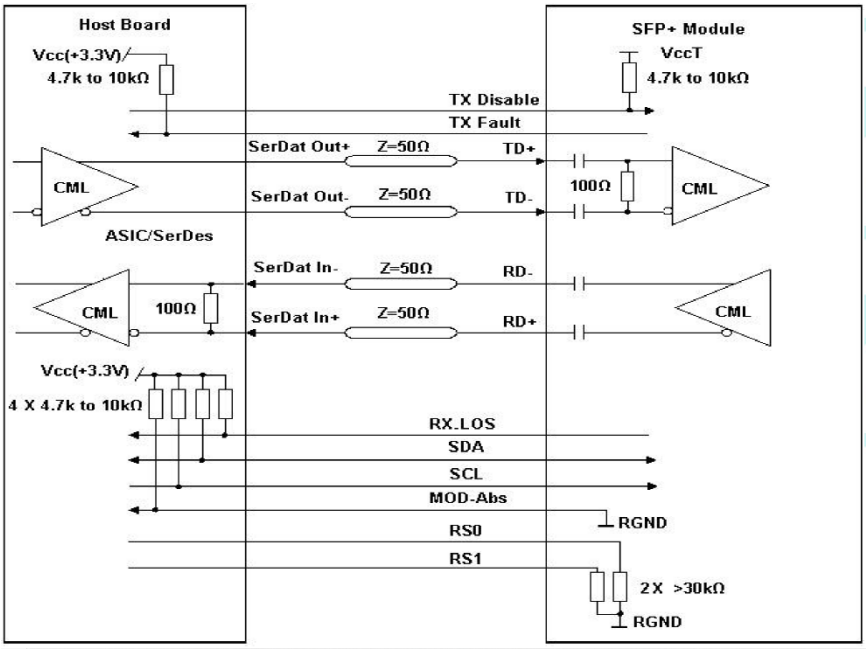
8. Pin Assignment



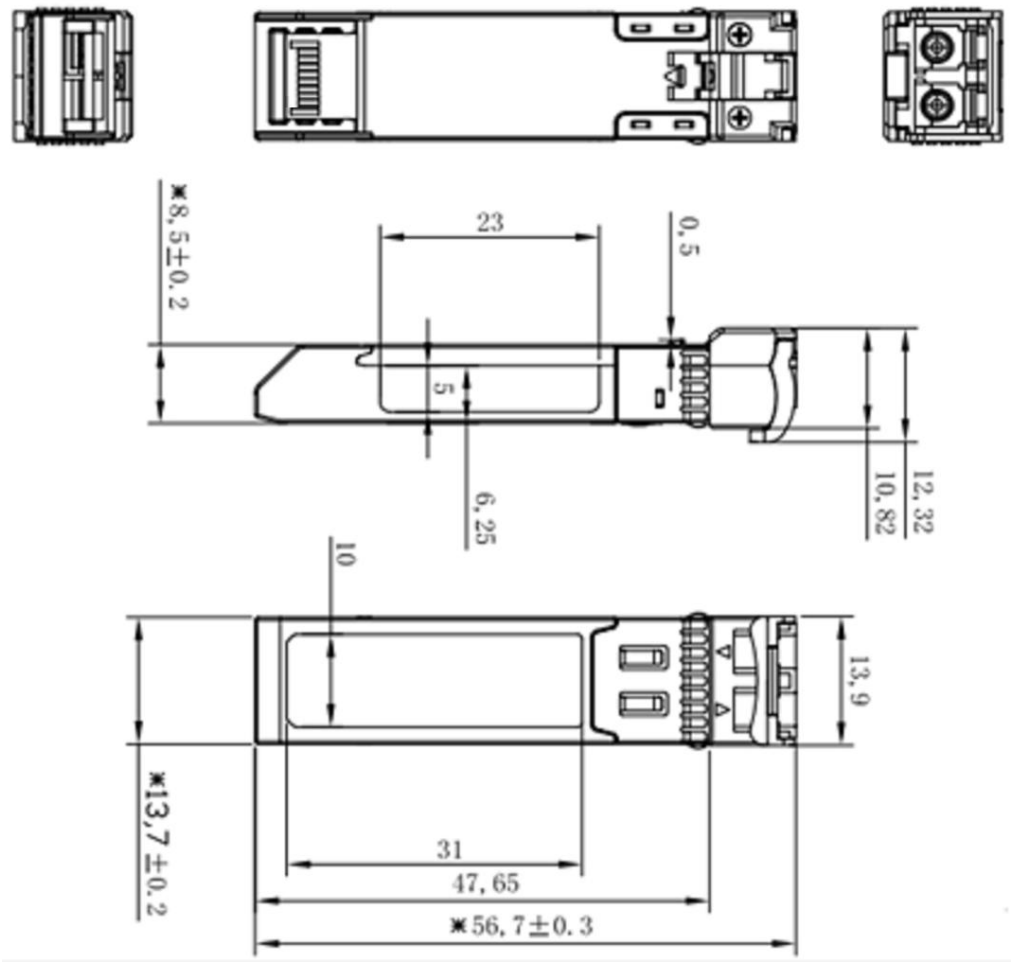
9. Digital Diagnostics Memory Map



10. Electrical Interface



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