25G/10G SFP28 SR 100m

25G/10G Eth, SFP28, SR, 100m, LC, 850nm, MM

CP-25E-SR-xDF02

OVERVIEW

The CP-25E-SR-xDF02 is a multimode SFP28 transceiver designed for 25 Gigabit Ethernet applications and 25G CPRI interfaces. It operates with an 850nm VCSEL laser and a PIN photodiode receiver and supports up to 100 meters on OM4 fiber and up to 70 meters on OM3 fiber. With the Clock and Data Recovery (CDR) functionality disabled, the transceiver can also be used for 10GbE-LAN and 10GbE-WAN services.

The module supports data rates up to 25.78Gbps and complies with the SFP28 Multi-Source Agreement and the SFF-8472 Digital Diagnostics Monitoring specification. The diagnostics interface provides real time monitoring of temperature, supply voltage, transmit optical power, receive optical power, and bias current.

The transceiver operates from a single 3.3V supply and is available in Commercial (0°C to +70°C) and Industrial (-40°C to +85°C) temperature options. It is designed for short reach optical links in data centers, backbone networks, and breakout applications.

KEY SPECIFICATIONS

- 25G SFP28 transceiver with duplex LC connector
- 850nm VCSEL transmitter and PIN photodiode receiver
- Support for 25G Ethernet (25GBASE-SR) and 10G WAN/LAN
- Up to 100m on OM4 MMF and 70m on OM3 MMF
- Less than 1W power consumption
- Temp operating conditions: Commercial (0°C to +70°C) and Industrial (-40°C to +85°C)

© CloudPhotonix India Pvt Ltd

TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	SFP28	**Transmitter Data:**	
Transmission Media	MM (LC)	Tx Power	-8.4 to +2.4dBm[3)]
Typical Reach	70 to 100m	Tx Wavelength	840 - 860nm
Nominal Wavelength	850nm	Extinction Ratio	≥ 2.0dB
Data Rate Support	24.33/25.78Gbps[1)], 9.95/10.31Gbps[2)]	**Receiver Data:**	
Protocol Support	25GbE[1)], CPRI[1)], 10GbE[2)]	Rx Sensitivity	-10.3dBm[3) 4)]
Power Consumption	<1.0W	Rx Overload, max	2.4dBm[4)]
Operating Temperature	0°C to 70°C / -40°C to 85°C	Rx Wavelength	840 - 860nm
Storage Temperature	-40°C to 85°C	LOS Assert	-30dBm
DDM	Yes	LOS De-assert	-13dBm
		LOS Hysteresis	0.5dB

[1)] CDR enabled
[2)] CDR disabled
[3)] Average power
[4)] @ 25.78Gbps, BER ≤5E-5, PRBS 2^{31}-1

Safety/Regulatory Compliance

- Class 1 laser safe
- RoHS Compliance

© CloudPhotonix India Pvt Ltd

ABSOLUTE MAX RATING

Exceeding these limits can cause permanent damage to the transceiver

Parameter	Value	Parameter	Value
Supply Voltage	-0.5V to 3.75V	Relative Humidity	85%
Storage Temp	-40°C to 85°C	Max Rx Optical Power	+2.4dBm

ORDERING INFORMATION

Ordering Code	Description
CP-25E-SR-CDF02	25G/10G SFP28, SR, 100m, LC, 850nm, MM, 0 to 70C
CP-25E-SR-IDF02	25G/10G SFP28, SR, 100m, LC, 850nm , MM, -40 to 85C

All information contained in this document is subject to change without prior notice at the sole discretion of CloudPhotonix. The company warrants the performance of its products solely in accordance with the current published specifications and applicable warranty terms. CloudPhotonix makes no other warranties, express or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement of third-party rights. For the most current certification and compliance information, please contact CloudPhotonix directly.

CONTACT INFORMATION

Email: sales@cloudphotonix.com
Phone: +91-1203116709, +91-1203116718
CloudPhotonix India Pvt. Ltd.
Block A-51, Sector 67
Noida – 201301, Uttar Pradesh, India

© CloudPhotonix India Pvt Ltd