# 6Gbps 300m SFP+ Transceiver

# CLSFP856GSW

## Product Features:

- Up to 6.125Gbps data links
- 300m with 50/125μm 2000MHz MMF
- 850nm VCSEL laser
- Duplex LC Connector
- Hot-pluggable SFP+ footprint
- Single 3.3V power supply
- Operating temperature: 0°C to 70°C
- RoHS
- Digital Diagnostic Monitor (DDM)
- Power Consumption < 0.8W

## Applications:

- 6Gb/s CPRI
- 6Gb/s OBSAI

## Functional Characteristics

The following tables list the performance specifications for the various functional blocks of the module.

**Table 1 – Optical Characteristics**

| Parameter | Symbol | Min. | Typical | Max. | Unit | Notes |
|---|---|---|---|---|---|---|
| **Transmitter** | | | | | | |
| Centre Wavelength | λc | 840 | 850 | 860 | nm | |
| Spectral Width (RMS) | σ | | | 0.5 | nm | |
| Average Output Power | Pout | -5 | | 0 | dBm | |
| Extinction Ratio | ER | 3.5 | | | dB | |
| Average Launch Power of Off Transmitter | Poff | | | -30 | dBm | |
| **Receiver** | | | | | | |
| Centre Wavelength | λc | 840 | 850 | 860 | nm | |
| Receiver Sensitivity | PIN | | | -13 | dBm | |
| Receiver Overload | Pmax | 0.5 | | | dBm | |
| LOS De-Assert | LOSD | | | -16 | dBm | |
| LOS Assert | LOSA | -18 | | | dBm | |
| LOS Hysteresis | | 0.5 | | | dB | |

**Table 2 – Electrical Characteristics**

| Parameter | Symbol | Min. | Typical | Max. | Unit | Notes |
|---|---|---|---|---|---|---|
| **Recommended Operating Conditions** | | | | | | |
| Operating Case Temperature | TC | 0 | | 70 | ℃ | |
| Power Supply Voltage | VCC | 3.15 | 3.3 | 3.45 | V | |
| Power Supply Current | ICC | | | 200 | mA | |
| Data Rate | | | 6.125 | | GBps | |
| Max Link Length on 50/125μm MMF | Lmax | | | 300 | m | |
| **Transmitter** | | | | | | |
| Input Differential Impedance | Zin | 90 | 100 | 110 | Ω | |
| Data Input Swing Differential | Vin | 200 | | 700 | mV | |
| Tx-Dis Disable | Vd | 2.0 | | Vcc | V | |
| Tx-Dis Enable | Ven | 0 | | 0.8 | V | |
| **Receiver** | | | | | | |
| Data Output Swing Differential | Vout | 300 | | 800 | mV | |
| Rx-Los Fault | Vlf | 2.0 | | Vcc Host | V | |
| Rx-Los Normal | Vln | 0 | | 0.8 | V | |
| Output Rise and Fall Time | Tr, Tf | 28 | | | ps | |

## Ordering Information

**Table 3 - Ordering Information**

| Part No. | Data Rate | DDM | Wave | Fiber Type | Dist. | Temp. | Optical Interface |
|---|---|---|---|---|---|---|---|
| CLSFP856GSW | 6Gbps | yes | 850nm | MMF | 300m | 0~70℃ | LC |

## CONTACT:

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