

S25G-BX60D-23

SFP28 BiDi 25GbE DDM SM 60km Tx/Rx=1290/1310nm 22dB

1. Product overview

Hot-pluggable SFP28 BiDi transceiver with uncooled DFB transmitter and APD-TIA receiver for up to 60 km over SMF. Hot-swappable in compliant ports; digital diagnostics support link monitoring.

2. Key features

- 60 km SMF transmission
- Simplex LC optical interface
- Digital Diagnostic Monitoring (DDM)
- Hot-pluggable form factor; single +3.3 V supply

3. Applications

25GBASE-BiDi 60 km; SANs and other optical links

4. Technical data

Parameter	Specification
Data rate	Up to 25.78 Gb/s
Fiber	Single-mode fiber
Connector	Simplex LC
Power consumption	<1.5 W; max dissipation 1.5 W
Storage temperature	-40 to +85°C
Absolute supply	-0.5 to +4.0 V
Operating humidity	= 85% RH
Input/output impedance	100 Ω differential (source notation)
TX / RX swing	180-1000 / 180-1000 mVpp
TX_DISABLE	>2 V disable / <0.8 V enable
TX_FAULT / LOS	High = fault / loss of signal

5. Recommended operating conditions

Parameter	Specification
Case temperature	0 to +70°C
Nominal supply	+3.3 V
Maximum reach	60 km
Recommended supply	3.13-3.47 V
Current	= 480 mA
Operating bit-rate range	24.3-26.5 Gb/s

S25G-BX60D-23

6. Optical characteristics

Parameter	Specification
TX nominal wavelength	1290 nm
RX nominal wavelength	1310 nm
TX wavelength range	1287-1301 nm
RX wavelength range	1306-1322 nm
Spectral width (-20 dB)	= 1 nm
SMSR	= 30 dB
TX output power	0 to +6 dBm
Extinction ratio	= 4 dB
Dispersion penalty	= 2.7 dB
RIN	= -130 dB/Hz
Sensitivity (OMA)	= -20 dBm
Stressed sensitivity	= -17 dBm
Receiver overload	= -4 dBm
LOS Assert / De-assert	-25 / -23 dBm
LOS hysteresis	0.5-5 dB
Receiver reflectance	= -26 dB
Budget (title)	22 dB

7. Digital diagnostics and management

Parameter	Specification
Temperature low / high alarm	-5 / +75°C
Voltage thresholds	3.0-3.7 V
TX bias thresholds	10-100 mA
TX power thresholds	-4 to +8 dBm
RX power thresholds	-22 to -3 dBm

8. Safety and regulatory

SFF-8431; SFF-8432; SFF-8402; SFF-8472; RoHS-6; IEEE 802.3cc.

9. Ordering information

Parameter	Specification
S25G-BX60D-23	SFP28 BiDi 25GbE DDM SM 60km Tx/Rx=1290/1310nm 22dB