

# XFP-10G-BX80-SY

# 10GBASE-BIDI ZR XFP, 80 km SMF TRANSCEIVER

#### 1. FEATURES AND SPECIFICATIONS

▶ Form Factor: XFP

> Operating Data Rate: 10G

Protocol(s): 10GE, FC, SONET (OC-192), SDH (STM64)

▶ Fiber Type: **SMF** 

▶ Technique: BIDI ZR

Lane Count: 1

▶ Wavelength(s)/Channel(s): U: Tx1490 nm/Rx1550 nm

D: Tx1550 nm/Rx1490 nm

Nominal Distance: 80 km

Nominal Power Budget: 24 dB

Connector: LC simplex

Temperature Range: 0 to +70°C, -40 to +85°C

> Compliance: XFP MSA, INF-8077i

Monitoring: Digital diagnostic monitor interface

▶ Laser Type: DFB

Receiver Type: PIN

Power Dissipation: 1.5 W

## 2. ABSOLUTE CHARACTERISTICS

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
SIGNAL INPUT VOLTAGE	V <sub>IN</sub>	0.2	-	0.7	V
POWER SUPPLY VOLTAGE	$V_{CC}$	-0.3	-	4	V
OPERATING TEMPERATURE	$T_{CASE}$	0	-	+70	°C
STORAGE TEMPERATURE	Ts	-40	-	+85	°C



# 3. ELECTRICAL OPERATING CONDITIONS

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
SUPPLY CURRENT	I <sub>cc</sub>	-	0.3	0.5	А
SUPPLY VOLTAGE	V <sub>cc</sub>	3.13	3.3	3.47	V

# 4. OPTICAL CHARACTERISTICS

# **RECEIVER**

PARAMETER	SYMBOL		MIN.	TYP.	MAX.	UNIT
OPTICAL WAVELENGTH	λC	U-4955 D-5549	1530 1470	1550 1490	1570 1510	nm
LOS HYSTERESIS	LOS <sub>H</sub>		0.5	-	4	dB
LOS ASSERT	$LOS_A$		-30	-	-	dBm
LOS DE-ASSERT	$LOS_D$		-	-	-26	dBm
RX MAX. SENSITIVITY	$P_{MIN}$		-	-	-24	dBm
DAMAGE THRESHOLD	$P_{MAX}$		0.5	-	-	dBm

### **TRANSMITTER**

PARAMETER	SYMBOL		MIN.	TYP.	MAX.	UNIT
OPTICAL WAVELENGTH	λC	U-4955 D-5549	1470 1530	1490 1550	1510 1570	nm
OPTICAL EXTINCTION RATIO	ER		3.5	-	-	dB
SIDE MODE SUPPRESSION RATIO	SMSR		30	-	-	dBm
SPECTRAL WIDTH	Δλ		-	-	1	dBm
OPTICAL TRANSMIT POWER	P <sub>OUT</sub>		0	-	5	dBm



#### 5. ORDERING INFORMATION

PART NAME	DESCRIPTION
XFP-10G-BX80U-SY	10GBase BIDI ZR XFP, ™1490 nm/R×1550 nm, 80 km over SMF, LC simplex, speeddy
XFP-10G-BX80U-I-SY	10GBase BIDI ZR XFP, $^{Tx}$ 1490 nm/ $^{Rx}$ 1550 nm, 80 km over SMF, LC simplex, Industrial temperature -40 to +85°C, speeddy
XFP-10G-BX80D-SY	10GBase BIDI ZR XFP, Tx1550 nm/Rx1490 nm, 80 km over SMF, LC simplex, speeddy
XFP-10G-BX80D-I-SY	10GBase BIDI ZR XFP, $^{Tx}$ 1550 nm/ $^{Rx}$ 1490 nm, 80 km over SMF, LC simplex, Industrial temperature -40 to +85°C, speeddy

#### 6. WARNINGS AND SECURITY INFORMATION



CAUTION: Class 1 visible laser radiation present. Long term viewing of the laser can be harmful to the human eye.



This equipment has been tested according to European legislation and has been found safe, non-intervening with other electronic devices and is not subject to interference from other electronic devices



Hazardous Goods; our products are fully compliant with Directive 2011/65/EU (RoHS II) and 2002/95 EC (RoHS I)

Laser Class 1

Our products comply with 21 CFR 1040.10 and 1040.11, except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007



Only (dis)connect the transceivers in an ESD Protected Area while using certified equipment and taking all necessary precautions as specified in IEC 61340-5-1.

#### 7. DISCLAIMER AND LEGAL NOTICES

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