

SFP-10G-BX80-SY

10GBASE-BIDI ZR SFP+, 80 km SMF TRANSCEIVER

1. FEATURES AND SPECIFICATIONS

- ▶ Form Factor: **SFP+**
- ▶ Operating Data Rate: **10G**
- ▶ Protocol(s): **10GE, FC**
- ▶ 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: **SFP+ MSA, SFF-8431, IEEE 802.3ae**
- ▶ Monitoring: **Digital diagnostic monitor interface**
- ▶ Laser Type: **DFB**
- ▶ Receiver Type: **APD**
- ▶ Power Dissipation: **1.5 W**

2. ABSOLUTE CHARACTERISTICS

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

3. ELECTRICAL OPERATING CONDITIONS

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
SUPPLY CURRENT	I _{CC}	-	0.3	0.5	A
SUPPLY VOLTAGE	V _{CC}	3.13	3.3	3.47	V

4. OPTICAL CHARACTERISTICS

RECEIVER

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	
OPTICAL WAVELENGTH	λ_C	U-4955 D-5549	1530 1490	1550 1490	1570 1510	nm
LOS HYSTERESIS	LOS _H	0.5	-	8	dB	
LOS ASSERT	LOS _A	-38	-	-	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	λ_C	U-4955 D-5549	1470 1530	1490 1550	1510 1570	nm
OPTICAL EXTINCTION RATIO	ER	7.5	-	-	dB	
SIDE MODE SUPPRESSION RATIO	SMSR	30	-	-	dBm	
SPECTRAL WIDTH	$\Delta\lambda$	-	-	1	dBm	
OPTICAL TRANSMIT POWER	P _{OUT}	0	-	5	dBm	

5. ORDERING INFORMATION

PART NAME	DESCRIPTION
SFP-10G-BX80U-SY	10GBase BIDI ZR SFP+, Tx1490 nm/Rx1550 nm, 80 km over SMF, LC simplex, speedy
SFP-10G-BX80U-I-SY	10GBase BIDI ZR SFP+, Tx1490 nm/Rx1550 nm, 80 km over SMF, LC simplex, Industrial temperature -40 to +85°C, speedy
SFP-10G-BX80D-SY	10GBase BIDI ZR SFP+, Tx1550 nm/Rx1490 nm, 80 km over SMF, LC simplex, speedy
SFP-10G-BX80D-I-SY	10GBase BIDI ZR SFP+, Tx1550 nm/Rx1490 nm, 80 km over SMF, LC simplex, Industrial temperature -40 to +85°C, speedy

6. COMPATIBILITY

ARISTA NETWORKS (SFP-10G-ZR), ARUBA NETWORKS/HP NETWORK (J9153A), CISCO SYSTEMS (SFP-10G-ZR), EXTREME (10310), HUAWEI (OSX040N01), JUNIPER (EX-SFP-10GE-ZR, SFP-10GE-ZR), MSA (SFP-10G-BX80D, SFP-10G-BX80U), NOKIA/ALCATEL-LUCENT (3FE55743AA, 3FE55744AA, 3HE05894AA)

7. 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.

8. DISCLAIMER AND LEGAL NOTICES

Speeddy makes no warranties or representations, expressed or implied, of any kind relative to the information or any portion thereof contained in this document or its adaptation or use, and assumes no responsibility or liability of any kind, including, but not limited to, indirect, special, consequential or incidental damages, for any errors or inaccuracies contained in the information or arising from the adaptation or use of the information or any portion thereof. The information in this document is subject to change without notice. Speeddy and the Speeddy logo are registered trademarks of renewtech B.V. All other trademarks are acknowledged as registered trademarks and proprietary to their respective owners. Copyright © 2023 renewtech B.V., Dutch Chamber of Commerce no. 75699877, all rights reserved. For more information visit www.speeddy.com