

# SFP+-Transceiver > DWDM

#### CSS-851A23D0-xx

#### **Product Description**

- Compliant with SFF-8431 (Electrical Interface Specification).
- Data rate from 1.0625 to 10.5 Gbps bit rates.
- EML transmitter and APD receiver.
- 45 DWDM channels out of C-band (100 GHz grid)
- High sensitivity APD receiver
- Link budget at least 23 dB (without dispersion penalty)
- Built-in Digital Diagnostic Functions as specified in the SFF-8472 MSA
- RoHS compliant and lead free
- Case operation temperature range: 0°C to 70°C
- Applications:
  - o 10GBASE-ZR/ZW 10G Ethernet
  - o 1200-SM-LL-L 10G Fiber Channel
  - o 8/4/2/1G Fiber Channel
  - o 1000 BASE-ZX Ethernet
- Compatible versions for different switch types available

■ Product Description: DWDM SFP+ Transceiver

■ Product Code: CSS-851A23D0

■ Channel Code: -ZZ (ITU channel number, chosen from table at the end of the datasheet)

Example Order Code: CSS-851A23D0-27 for a SFP+ for the DWDM channel C27 nm.



# Revision History No. Date Created by A Initial release | 12.11.12 | Carsten Marheine





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Fiber Type   SMF-28 compatible	One and One although a con-							
Storage Temperature   -40°C to +85°C   Optical Adapters   LC/PC duplex    Absolute Maximum Ratings   Supply Voltage   -0.5 V to 4.0 V   Relative Humidity   5 to 95%    Operating Conditions   Operating Case Temperature   0°C to 70°C   Supply Voltage   3.15 V to 3.45 V (typ. 3.3 V)   Supply Current   < 680mA    Transmitter Specifications   Operating Channel   Any ITU CWDM channel from 1470 nm to 1610 nm, selected via order code   Channel Spacing   20 nm   Average Optical Power   0 +4 dBm   Extinction Ratio   > 3.5 dB    Receiver Specifications   Input Operating Wavelength   1260nm to 1620nm   Receiver Sensitivity   <-23 dBm   Receiver Overload   (Damage Threshold)   >-8 dBm   LOS De-Assert   <-25 dBm	General Specifications							
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-0.5 V to 4.0 V    -0.5 V to 95%    -0.5 V to 95%    -0.5 V to 70°C    -0.5 V to 70°C    -0.5 V to 3.45 V (typ. 3.3 V)    -0.5 V to 4.0 V (typ. 3.3 V (typ. 3.								
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Receiver Sensitivity (optical power)	Receiver Specifications							
(optical power)   <-23 dBm    Receiver Overload (Damage Threshold)   >-8 dBm    LOS De-Assert   <-25 dBm	Input Operating Wavelength	1260nm to 1620nm						
(Damage Threshold)   > -8 dBm     Cost De-Assert   Cost D	-	<-23 dBm						
		> -8 dBm						
LOS De-Assert > -40 dBm	LOS De-Assert	<-25 dBm						
T and the state of	LOS De-Assert	> -40 dBm						
Data Rate 1.0625 Gbps to 10.5 Gbps	Data Rate	1.0625 Gbps to 10.5 Gbps						

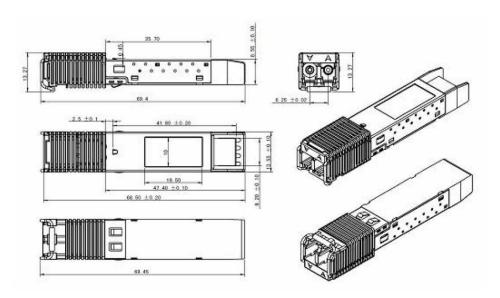




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# CSS-851A23D0-xx

#### **Package Outline**



(All dimensions are shown in millimeters.)



# SFP+-Transceiver > DWDM

### CSS-851A23D0-xx

#### **Available DWDM Channels**

Channel Number	Frequency (GHz)	Wavelength (nm)	Channel Number	Frequency (GHz)	Wavelength (nm)
C17	191700	1563.86	C40	194000	1545.32
C18	191800	1563.05	C41	194100	1544.53
C19	191900	1562.23	C42	194200	1543.73
C20	192000	1561.42	C43	194300	1542.94
C21	192100	1560.61	C44	194400	1542.14
C22	192200	1559.79	C45	194500	1541.35
C23	192300	1558.98	C46	194600	1540.56
C24	192400	1558.17	C47	194700	1539.77
C25	192500	1557.36	C48	194800	1538.98
C26	192600	1556.55	C49	194900	1538.19
C27	192700	1555.75	C50	195000	1537.40
C28	192800	1554.94	C51	195100	1536.61
C29	192900	1554.13	C52	195200	1535.82
C30	193000	1553.33	C53	195300	1535.04
C31	193100	1552.52	C54	195400	1534.25
C32	193200	1551.72	C55	195500	1533.47
C33	193300	1550.92	C56	195600	1532.68
C34	193400	1550.12	C57	195700	1531.90
C35	193500	1549.32	C58	195800	1531.12
C36	193600	1548.51	C59	195900	1530.33
C37	193700	1547.72	C60	196000	1529.55
C38	193800	1546.92	C61	196100	1529.77
C39	193900	1546.12			

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