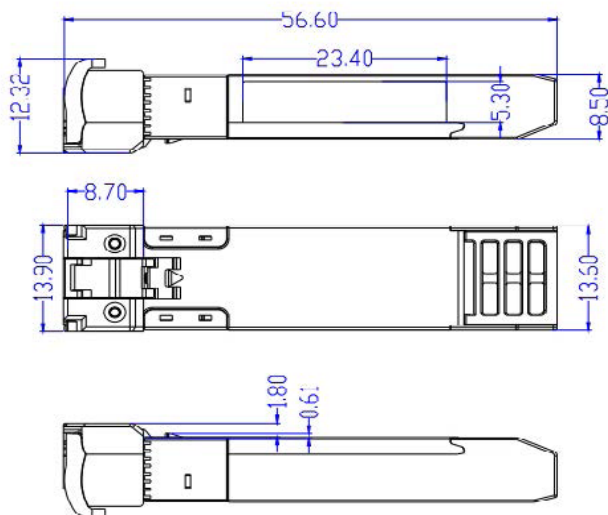




Product Description

Briticom® Small Form-Factor Pluggable (SFP) Fibre Optic Transceivers are used to interface networking devices to fibre or copper networking cables in Telecom and data applications.

Features & Benefits

- Optical interface compliant to IEEE 802.3ae 10GBASE-LR
- Electrical interface compliant to SFF-8431
- Hot Pluggable
- 4-Wavelengths CWDM DFB transmitter from 1470nm to 1610nm, PIN photo-detector
- Operating case temperature: 0 to 70 °C
- Low power consumption
- Applicable for 20km SMF connection
- All-metal housing for superior EMI performance
- Advanced firmware allow customer system encryption information to be stored in transceiver
- Cost effective SFP+ solution, enables higher port densities and greater bandwidth

Applications & Standards

- 10GBASE-LR at 10.3125Gbps
- 10GBASE-LW at 9.953Gbps
- Other optical links

Recommended Operating Conditions

PARAMETER	SYMB	MIN	TYP.	MAX	UNIT
Power Supply Voltage	Vcc	3.135	3.300	3.465	V
Operating Case Temperature	Tc	0	25	70	°C

To Order

To place an order, use the contact details below.



Optical Characteristics

PARAMETER	SYMBOL	MIN	Notes
Operating Reach	m	20km	
Transmit			
Center Wavelength (range)	nm	1270-1610	
Side Mode Suppression Ratio (min)	dB	30	
Launched Power			
- maximum	dBm	0	
- minimum	dBm	-5	1
- OMA	dBm	-5.2	
Average launch power of OFF transmitter	dBm	-30	
Extinction ratio (min)	dB	3.5	2
RIN12 OMA (max)	dB/Hz	-128	
Optical Return Loss Tolerance (min)	dB	12	
Receiver			
Center Wavelength (range)	nm	1260-1355	
Receive overload (max) in average power1	dBm	0.5	
Receive sensitivity (min) in average power1	dBm	-15	3
Vertical eye closure penalty (min)3	dB	2.2	
Stressed eye jitter (min)2	Ulp-p	0.7	
Receive electrical 3dB upper cutoff frequency (max)	GHz	12.3	
Receiver power (damage, Max)	dBm	1.5	

The optical power is launched into SMF

2. Measured with a PRBS 231-1 test pattern@10.3125Gbps

3. Measured with a PRBS 231-1 test pattern@10.3125Gbps BER≤10⁻¹²

4. In G.652 and G.655(NDSF)

Electrical Characteristics

PARAMETER	SYMBOL	MIN	TYPICAL	MAX	UNIT	NOTES
Data Rate		-	10.3125	-	Gbps	
Power Consumption		-	1200	1500	mW	
Transmitter						
Single Ended Output Voltage Tolerance		-0.3	-	4.0	V	
C common mode voltage tolerance		15	-	-	mV	
Tx Input Diff Voltage	VI	400	-	1600	mV	
Tx Fault	VoL	-0.3	-	0.4	V	At 0.7mA
Data Dependant Input Jitter	DDJ	-	-	0.10	UI	
Data Input Total Jitter	TJ	-	-	0.28	UI	
Receiver						
Single Ended Output Voltage Tolerance		-0.3	-	4.0	V	
Rx Output Diff Voltage	Vo	300	-	850	mV	
Rx Output Rise and Fall Time	Tr/Tf	30	-	-	ps	20% to 80%
Total Jitter	TJ	-	-	0.70	UI	
Deterministic Jitter	DJ	-	-	0.42	UI	

To Order

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Ordering Information

Use combinations of **bold** letters and numbers to create part numbers for ordering.

Product		Type		Coding Type*	
SFP	SFP	RJ	RJ45	CIS	Cisco
XFP	XFP	SM	Single-mode	HP	HP
QSFP	QSFP	MM	Multimode	JP	Juniper
SFP+	SFP+	BIDI	Bi-Directional	EX	Extreme
		WDM	WDM		Leave empty if no coding
		DDMI	DDMI		
		DWDM	DWDM		
		CWDM	CWDM		
⬆		⬆		⬆	
SFP+	GX	CWDM	20	CIS	
	⬇		⬇		
100M	ET	100m	100		
1GB	G1	500m	500		
2GB	G2	2km	2		
5GB	G5	10km	10		
6GB	G6	20km	20		
10GB	GX	40km	40		
20GB	G2X	80km	80		
40GB	G4X	120km	120		
100GB	GXX				
Speed		Distance			

*Leave column blank if no coding

Example Part Number	
Description	Part Number
SFP+ 10GB CWDM 20km Cisco	SFPPGXCWDM20CIS

To Order

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