

SFP+ RJ45 OPTEC, 10G, 20M (10GBASE-T)



SFP+ RJ45 OPTEC, 10G, 20m (10GBase-T) - Cooper Small Form Pluggable (SFP) modules are based on the SFP Multi Source Agreement (MSA). It is compliant with the 10G BASE-T, 1000BASE-T, 100BASE-TX standards as specified in IEEE STD 802.3an, 802.3ab and 802.3au.

APPLICATIONS

- 10G BASE-T IEEE 802.3an •
- 1000BASE-T IEEE 802.3ab •
- 100BASE-TX IEEE 802.3u •
- 5G MGBASE-T •
- 2.5G MGBASE-T •

FEATURES

- Support 10GBASE-T Operation in Host Systems
- Support RX_LOS as Link indication function
- Hot-Pluggable SFP Footprint
- Compact RJ-45 Connector Assembly
- Compliant with SFP MSA
- Operating Case Temperature: Standard 0°C~70°C



Product Information

Product Name	Data Rate	Media Type	Distance	Interface	Temp.	DDMI
SFP+ RJ45 OPTEC, 10G, 20m (10GBase-T)	10G	CAT6A/CAT7	20m	RJ45	0°C~+70°C	NO

Absolute Maximum Ratings^{*note1}

Parameter	Symbol	Min.	Max.	Unit
Maximum Supply Voltage	V _{cc}	-0.5	4.0	V
Storage Temperature	V _{cc}	-40	85	°C

note1 - Exceeding any one of these values may destroy the device immediately.

Recommended Operating Conditions

Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Case Temperature	T _c	0	-	70	°C
Power Supply Voltage	V _{cc}	3.14	3.3	3.46	V

Performance Specifications - Electrical

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
+3.3 Volt Electrical Power Interface						
Supply Current	I _{cc}	-	-	800	mA	-
Input Voltage	V _{cc}	3.13	3.3	3.47	V	-
Low-Speed Signals, Electronic Characteristics						
SFP Output LOW	V _{OL}	0	-	0.5	V	4.7k to 10k pull-up to host_V _{cc} , measured at host side of connector
SFP Output HIGH	V _{OH}	host_V _{cc} - 0.5	-	host_V _{cc} + 0.3	V	4.7k to 10k pull-up to host_V _{cc} , measured at host side of connector

SFP Input LOW	VIL	0	-	0.8	V	4.7k to 10k pull-up to Vcc, measured at SFP side of connector
SFP Input HIGH	VIH	2	-	Vcc + 0.3	V	4.7k to 10k pull-up to Vcc, measured at SFP side of connector
High-Speed Electrical Interface, Transmission Line-SFP						
Tx Output impedance	Zout,TX	-	100	-	Ohm	Differential, for all frequencies between 1MHz and 125MHz
Rx Input Impedance	Zin,RX	-	100	-	Ohm	Differential, for all frequencies between 1MHz and 125MHz
High-Speed Electrical Interface, Host-SFP						
Single ended data input swing	Vin	250	-	1200	mV	Single ended
Single ended data output swing	Vout	350	-	800	mV	Single ended
Rise/Fall Time	Tr,Tf	-	20	-	psec	20%-80%
Tx Input Impedance	Zin	-	50	-	Ohm	Single ended

Regulatory Compliance	
Product Certificate	Applicable Standard
TUV	EN 60950-1:2006+A11+A1+A12+A2
	EN 60825-1:2014
	EN 60825-2:2004+A1+A2
UL	UL 60950-1
	CSA C22.2 No. 60950-1-07
EMC CE	EN 55022:2010
	EN 55024:2010
CB	IEC 60825-1
	IEC 60950-1
FCC	47 CFR PART 15 OCT., 2013
FDA	CDRH 1040.10
ROHS	2011/65/EU