

# SFP+ PRODUCTS

Driving Your Next Generation DataCenter

## 10G SFP+ Twinax Direct Attach Copper Cable

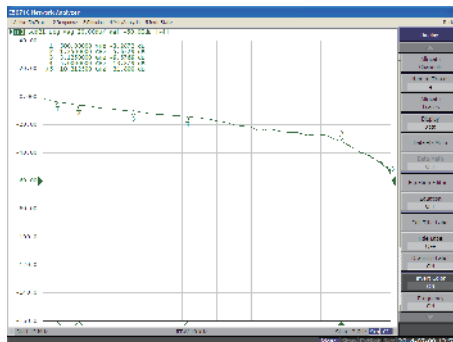
### APPLICATIONS

- InfiniBand SDR, DDR, QDR
- Ethernet
- Fiber Channel 8G, 10G
- FCoE 10G
- Networking, Storage
- Hubs, switches, routers, servers, NICs

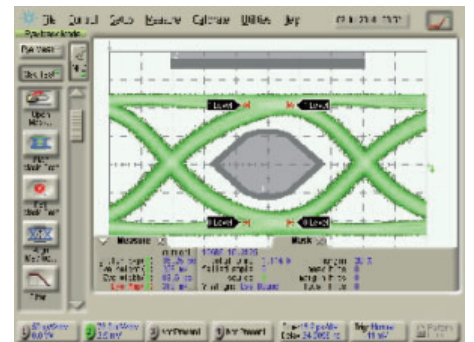
### STANDARDS COMPLIANCE

- Electrical: SFF-8431, SFF-8083
- Mechanical: SFF-8432
- EEPROM: SFF-8472

10Gtek Connectivity's SFP+ direct attach copper cable assemblies are a high speed, cost-effective alternative to fiber optics in 10Gb Ethernet, 8Gb Fiber Channel and InfiniBand applications. SFP+ copper cable assemblies enable hardware OEMs and data center operators to achieve high port density and configurability at a low cost and reduced power requirement. 10Gtek SFP+ copper assemblies meet the industry MSA for signal integrity performance.



Typical Passive Cables Insertion Loss  
5.5 meters



Typical Active Cables Eye Pattern  
10 meters

# Performance Specifications:

## SFP+ Passive Copper Cable Assemblies

Passive Cable Electrical				
Parameter	Symbol	Min	Type	Max
Input voltage(V)	Vcc	3.15	3.3	3.45
Clock frequency(kHz)	Fscl			400
Power(mW)				0.001
Current(mA)	Icc			0.1
Data rate(Gbps)		0.010		10.3125
BER(bit error rates)				10 <sup>-12</sup>
Operating Temperature( °C )		0		70

## SFP+ Active Copper Cable Assemblies

Active Cable Electrical				
Parameter	Symbol	Min	Type	Max
Input voltage(V)	Vcc	3.315	3.30	3.465
Clock frequency(kHz)	Fscl			400
Power(mW)				600
Current(mA)	Icc		160	180
Data rate(Gbps)		0.010		10.3125
Operating Temperature( °C )				70
Differential Input Voltage Swing(mVp-p)	V DIFF	100		1800
Differential Output Voltage Swing(mVp-p)	V DIFF			600
Data Output Rise Time/Fall Time(ps)	Tr,Tf			120
BER(bit error rates)				10 <sup>-12</sup>

# Ordering Information:

## SFP+ Copper Cable Assemblies

Length	P/N	AWG		
1m	CAB-10GSFP-P1M	24	28	30
2m	CAB-10GSFP-P2M	24	28	30
3m	CAB-10GSFP-P3M	24	28	30
5m	CAB-10GSFP-P5M	24	28	/
7m	CAB-10GSFP-P7M	24	/	/
10m	CAB-10GSFP-P10M	24	/	/

Length	P/N	AWG		
1m	CAB-10GSFP-A1M	/	/	30
3m	CAB-10GSFP-A3M	/	/	30
5m	CAB-10GSFP-A5M	/	/	30
7m	CAB-10GSFP-A7M	/	28	30
10m	CAB-10GSFP-A10M	24	28	/
15m	CAB-10GSFP-A15M	24	/	/

Plug	
Back shell Material	Nickel-Plated Zinc Diecast
Contact	PCB with Gold-Plated Pads
Latch	Positive Latching w/Pull
Insertion Force	40N Max
Withdrawal Force	11.5N Max
Retention Force	90N Max
Durability	250 Cycles Min

General	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Mohms Current Rating	0.5 Amp Min/signal Contact
Flammability Rating	UL 94 V-0
Green Features	ROHS, Lead-Free
Shield	Braid/Foil

Raw Cable	
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedance	100±5 ohms
Construction	Twinaxial
	30 AWG=4.2mm(0.165 in)
Cable OD	28 AWG=4.7mm(0.185 in)
	24 AWG=6.2mm(0.248 in)
Jacket Type	PVC
Bend Radius	5X Cable OD