

MiniSAS PRODUCTS

Driving Your Next Generation DataCenter

Mini-SAS HD Copper Cable Assemblies

APPLICATIONS

- DATA
- Servers
- RAID systems
- Storage racks
- External Storage Systems
- SAS/SATA HBA interfaces
- Direct-attached storage (DAS)
- Communications
- Switches

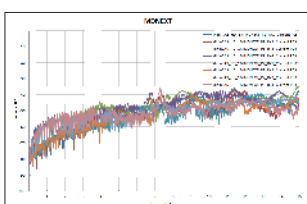
STANDARDS COMPLIANCE

- SAS 2.1
- SFF-8644

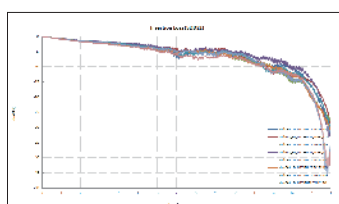
10Gtek Mini SAS HD receptacle assembly is the next-generation SAS high-density high-speed IO interface. This interface was adopted for the SAS 2.1 standard and proposed for SAS 3.0 standard, and is designed to support 6G and future 12G SAS applications. The assembly is offered in 4x, 8x, and 16x versions. The reduced size of the Mini SAS HD system provides additional space for system designers. While a low profile PCIe card can accept four 4x Mini SAS connectors, it can only accept two of Mini SAS connectors.

The passive Mini SAS HD copper cable assembly is designed for broadband operation optimized for 6 and 12 Gbps. The EEPROM signature enables the host to identify what type and length of cable is connected to its port, and can be customized for any application. An improved latch design reduces the insertion force and increases the retention force.

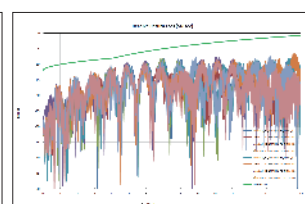
Typical MiniSAS HD S Parameters 3Meters



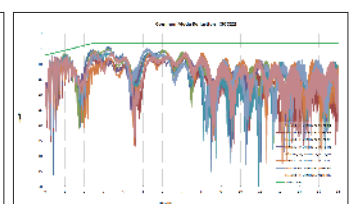
MDNEXT



Insertion Loss (SDD21)



Receive Return Loss (SDD22)



Common Mode Reflection (SCC22)

Performance Specifications:

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		12
Operating Temperature(°C)		0		70

Plug

Back shell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Plastic Material	PA66
Latch	Positive Latching w/Pull
Insertion Force	100N Max
Withdrawal Force	50N Max
Retention Force	133.5N Min
Durability	250 Cycles

General

Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/signal Contact
Flammability Rating (Plastics)	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=5.10mm(0.200 in)
Cable OD	28 AWG=7.00mm(0.275 in)
	24 AWG=7.60mm(0.299 in)
Jacket Type	PVC
Bend Radius	5X Cable OD-Single

Ordering Information:

Mini-SAS HD Passive Copper Cable Assemblies

Length	Data Rate	P/N	Description	AWG
0.5 m	12Gbps	CAB-8644/8644-P50CM	4x Passive Mini SAS HD	/ / 30
1 m	12Gbps	CAB-8644/8644-P1M	4x Passive Mini SAS HD	/ / 30
2 m	12Gbps	CAB-8644/8644-P2M	4x Passive Mini SAS HD	/ / 30
3 m	12Gbps	CAB-8644/8644-P3M	4x Passive Mini SAS HD	/ / 30
5 m	12Gbps	CAB-8644/8644-P5M	4x Passive Mini SAS HD	/ 26 /
7 m	12Gbps	CAB-8644/8644-P7M	4x Passive Mini SAS HD	/ 26 /
10 m	12Gbps	CAB-8644/8644-P10M	4x Passive Mini SAS HD	24 / /

Mini-SAS HD 8644 to Mini-SAS 8088 Passive Copper Cable Assemblies

Length	Data Rate	P/N	Description	AWG
0.5 m	6Gbps	CAB-8644/8088-P50CM	4x Passive Mini SAS HD 8644 to Mini SAS 8088	/ / 30
1 m	6Gbps	CAB-8644/8088-P1M	4x Passive Mini SAS HD 8644 to Mini SAS 8088	/ / 30
2 m	6Gbps	CAB-8644/8088-P2M	4x Passive Mini SAS HD 8644 to Mini SAS 8088	/ / 30
3 m	6Gbps	CAB-8644/8088-P3M	4x Passive Mini SAS HD 8644 to Mini SAS 8088	/ / 30
5 m	6Gbps	CAB-8644/8088-P5M	4x Passive Mini SAS HD 8644 to Mini SAS 8088	/ 26 /
7 m	6Gbps	CAB-8644/8088-P7M	4x Passive Mini SAS HD 8644 to Mini SAS 8088	24 26 /
10 m	6Gbps	CAB-8644/8088-P10M	4x Passive Mini SAS HD 8644 to Mini SAS 8088	24 / /