

Serial-ATA (SATA) CABLE ASSEMBLIES

DESCRIPTION

SATA cable assemblies double the bandwidth between external storage and other PC components at data transfer rates peaking at 250MB/sec & at speeds from 1.5 to 3Gbit/sec. It is the standard storage interface for PCs and low-end servers. This standard replaces the 26 positions ribbon connector with two small flexible cable assemblies for signal and power applications.

SATA connector can be directly connected (hot plugged) to motherboards and back planes similar to current SCSI(SAS) application eliminating the need for ribbon cable assemblies completely. SATA cable assemblies are available with 7 terminals to handle serial bus signal or 15 terminals for different source of voltage to power up the device.



FEATURES & BENEFITS

- Available in straight and right angle
- Small form factor and low profile
- Available in 7, 13, 15 and 22 pins
- PVC or Halogen-free options
- Rohs compliant

TARGET MARKETS / APPLICATIONS

- External storage
- Storage device
- Server
- Desktop PC
- Set-top box
- **DVD**
- CD-ROM



TECHNICAL INFORMATION

MATERIALS

 Contacts: copper alloy or Ph bronze, gold plated over nickel

Receptacle: LCP UL94V-0Cable: PVC or Halogen free

► Hood: PVC or PBT

ENVIRONMENTAL

Temperature range: -20°C to +65°C

Physical shock: Total 18 shocks at 6 directions

Temperature life: 500 hours

Thermal shock: 10 cycles between -55°C and +85°C

Passed mixed flowing gas test

MECHANICAL PERFORMANCE

■ Cable pull-out: 40N min for one minute

Cable flexing: 250 cycles
Insertion force: 45N maximum
Removal force: 10N minimum
Durability: 50 mating cycles

SPECIFICATIONS

Product specification: GS-12-194Product specification: GS-12-200

PACKAGING

Packing specification:GS-14-866

ELECTRICAL PERFORMANCE

Signal cable

• Mated connector impedance:100 ohm± 15%

• Cable absolute impedance:100 ohm± 10%

• Common mode impedance: 25 to 40 ohm

• Cable pair matching: ± 5 ohm

• Insertion loss:6 dB maximum

• Crosstalk:-26 dB

• Intra-pair skew:10ps maximum

Power cable

• Rating current: AC/DC 1.5A minimum per contact

PART NUMBERS

- ▶ 7P Signal SATA cable assembly
 - 10025025 series (ST to ST)
 - 10063856 series (RA to ST)
 - 10072706 series (ST to ST with latch)
- 15P Power SATA cable assembly
 - 10028510 series (ST to ST)
 - 10077325 series (RA to ST, Halogen free)
 - 10081199 series (ST to ST, Halogen free)
 - 10082593 series (RA to ST, Halogen free)

* RA: Right angle ST: Straight