

# MICRO SATA CONNECTORS

## OVERVIEW

Micro SATA connectors from FCI enable smaller 1.8in. SATA drive form factors for hard disk drives (HDDs) or solid state drives (SSDs). The connectors comply with the Serial ATA Specification issued by the Serial ATA International Organization (SATA-IO) and facilitate the use of 1.8in. SATA drives in mobile computers, set top boxes, game consoles or portable storage units.

Micro SATA signal and power contacts are spaced on 1.27mm pitch. The signal segment of the internal micro SATA connector uses the same contact configuration as a standard SATA connector and supports Gen2 data rates of 3Gb/s. Other connector features include 7+2 power pins with a power segment key, staggered contact lengths for hot-plug support, guide posts and slot openings to assure proper alignment during blind mating, as well as friction locks for cable applications. The plug connector fits 5mm or 8mm slim 1.8in. form factor drives while the right-angle receptacle connector is used on host systems.



## FEATURES & BENEFITS

- Compliant with Micro SATA requirements in Serial ATA Specification
- 16 contacts on 1.27mm pitch: 7 for signals and 7+2 for power
- Supports Gen 1 (1.5Gb/s) and Gen 2 (3Gb/s) data rates
- High-durability design supports 500 mating cycles
- Designed to support hot-plugging and blind mating of HDDs
- Connector retainers provide additional mechanical strength after soldering
- RoHS-compliant compatible with lead-free processing temperatures

## TARGET MARKETS/APPLICATIONS

- Data
  - Notebook PC
  - Sub-notebook PC
  - Portable storage (external drive)
- Consumer
  - Set top box
  - Gaming console
  - Audio/Video storage



## TECHNICAL INFORMATION

### MATERIALS

- Housing: Glass filled LCP (UL94V-0), Black
- Contact – Signal/Power
  - Brass (Plug)
  - Copper alloy (Receptacle)
- Soldering tab – optional
  - Brass
- Plating
  - Underplate finish: Nickel
  - Contact area: Gold

### ELECTRICAL PERFORMANCE

- Insulation resistance:
  - Initial 1000M $\Omega$  min.
  - After test 1000M $\Omega$  min.
- Current rating: 1.5A per contact
- Contact resistance
  - Initial 30M $\Omega$  max.
  - After test 50M $\Omega$  max.
- Voltage rating: 100V AC

### PART NUMBERS

Description	Base Number
Plug – straddle mount	10078287
Receptacle – through hole mount	10080211
Receptacle – surface-mount	10105229

### MECHANICAL PERFORMANCE

- Durability: 500 cycles
- Mating force: 45 N max.
- Unmating force: 10 N min.
- Temperature range: -40°C to +105°C.

### SPECIFICATIONS

- Product specification: GS-12-494

### PACKAGING

- Trays