

PC BOARD CONNECTORS

740 SERIES

■ FEATURES

- Various types of headers are available: one side shrouded, both sides shrouded, with simplified latch, and box type.
- The connector having a simplified latch prevents the connector from working loose because of vibration.
- The mini header has a clip to prevent incorrect insertion.
- A 740 series connector with a power terminal for SCSI/IDE interface unit connections is also available.

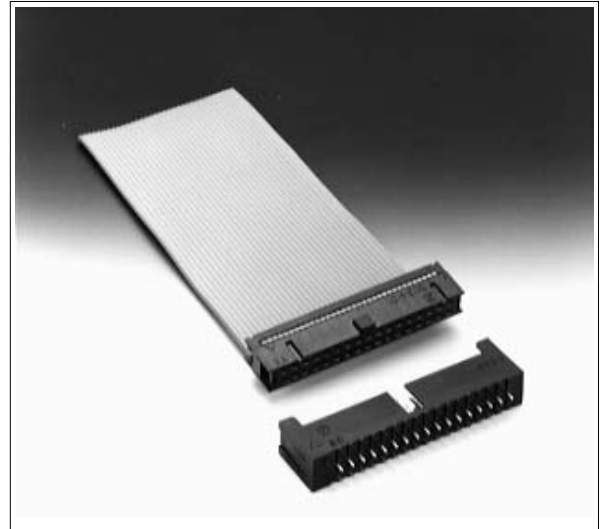
■ SPECIFICATIONS

1. Standard type

| Item | Specification |
|--------------------------------|--|
| Operating temperature range | -55°C to +105°C |
| Current rating | DC 1 A |
| Voltage rating | AC 250 V |
| Contact resistance | 15 mΩ max. (DC 6 V, 0.1 A) |
| Insulation resistance | 1000 MΩ min. (DC 500 V) |
| Dielectric strength | AC 500 V for 1 minute |
| Insertion force | 3.5 kg max. (10 pins), 10.5 kg max. (30 pins) |
| Withdrawal force | 0.25 kg min. (10 pins), 1.0 kg min. (30 pins) |
| Applicable wire | Flat cable: 1.27 mm (0.050 in.) pitch AWG #28 (stranded) or AWG #30 (solid) |
| Applicable PC board (standard) | 1.6 mm |

2. Power connector integrated type

| Item | Specification |
|--------------------------------|--|
| Operating temperature range | -55°C to +105°C |
| Current rating | DC 1 A (signal pin) DC 5 A (power pin) |
| Voltage rating | AC 250 V |
| Contact resistance | 15 mΩ max. (signal pin, DC 6 V, 0.1 A) 10 mΩ max. (power pin, DC 6 V, 0.3 A) |
| Insulation resistance | 1000 MΩ min. (DC 500 V) |
| Dielectric strength | AC 500 V for 1 minute (signal pin) AC 1000 V for 1 minute (power pin) |
| Insertion force | 50-contact signal pin: 17.5 kg max. 40-contact signal pin: 14.0 kg max. Power pin (reference value): 8.8 kg max. |
| Withdrawal force | 50-contact signal pin: 2.0 kg max. 40-contact signal pin: 1.5 kg max. Power pin (reference value): 0.8 kg max. |
| Applicable PC board (standard) | 1.6 mm (0.062 in.) (through hole type) |



■ MATERIALS

1. Standard type

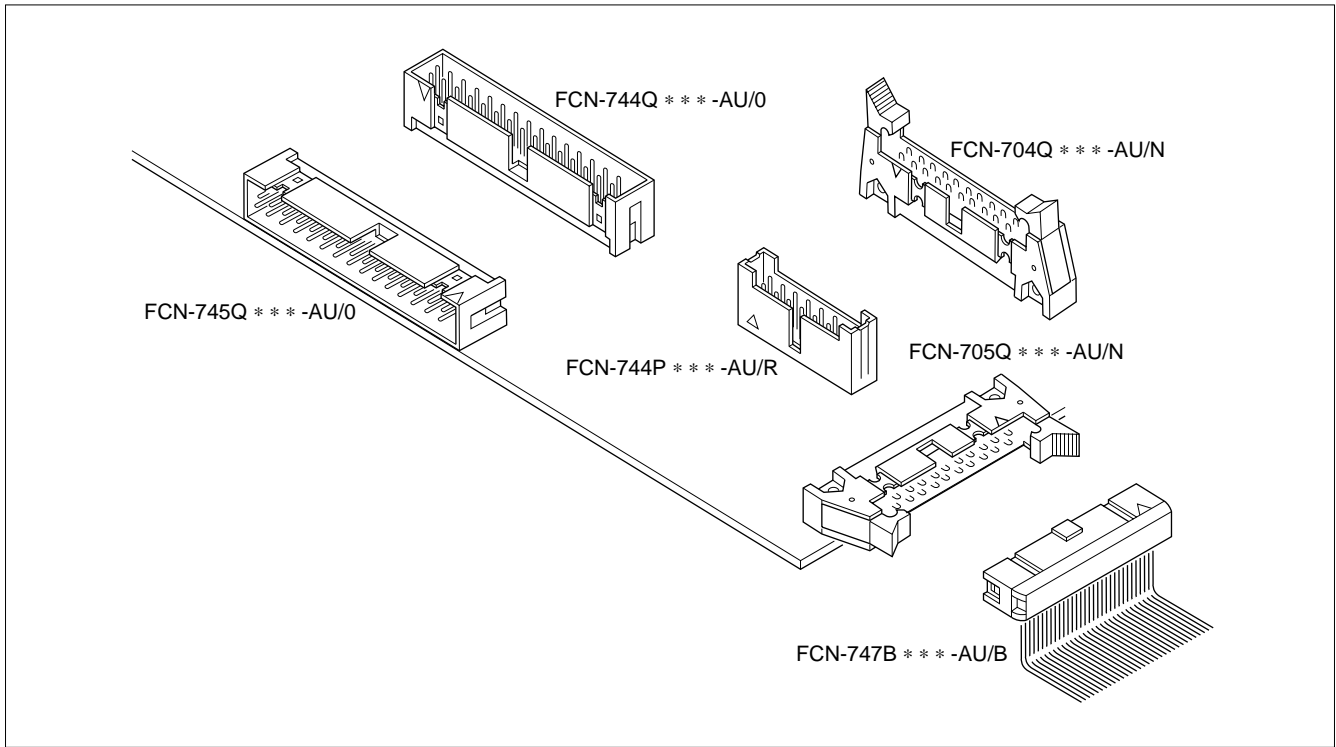
| Item | Materials | |
|---------------------|---------------------|-----------|
| Insulating material | Polyester (UL94V-0) | |
| Conductor | Copper alloy | |
| Plating | Contact | Gold |
| | Terminal | Palladium |

2. Power connector integrated type

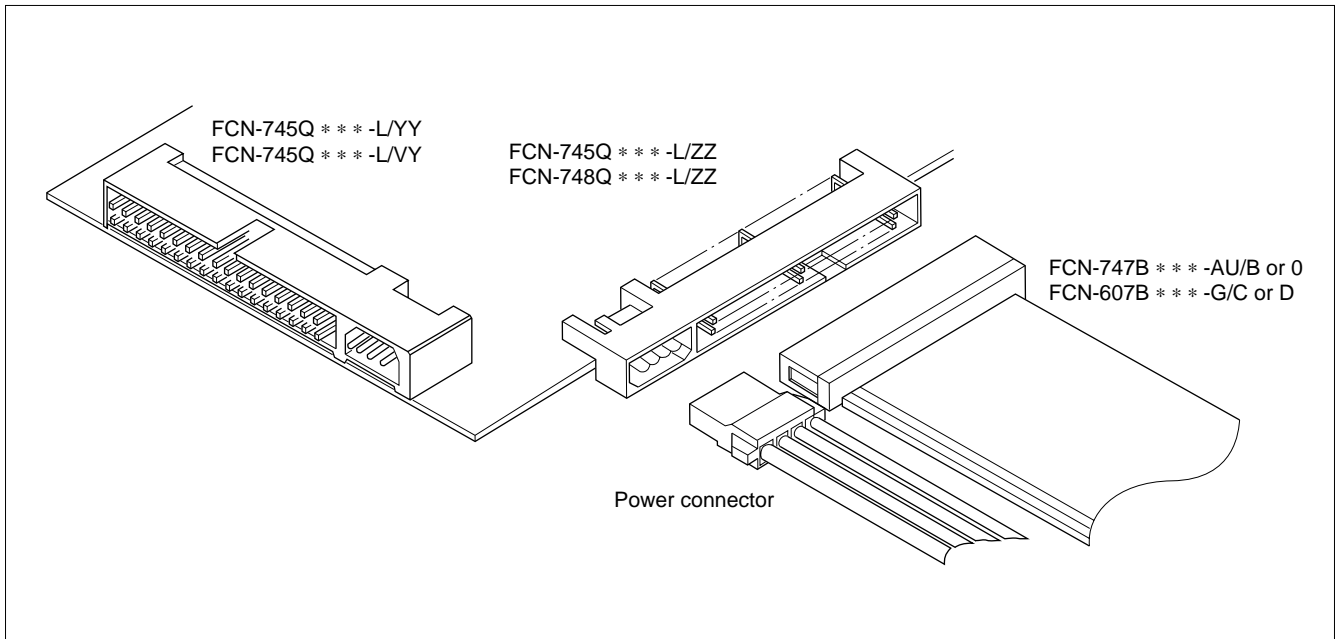
| Item | Materials | |
|---------------------|--|-----------|
| Insulating material | Through hole type: Polyester (UL94V-0) SMT type: PPS (UL94V-0) | |
| Conductor | Copper alloy | |
| Plating | Signal pin contact | Gold |
| | Signal pin tail | Palladium |
| | Power pin | Solder |

■ APPLICATION EXAMPLE

1. Standard type

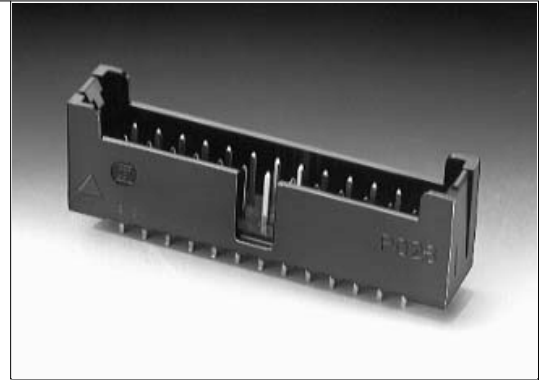
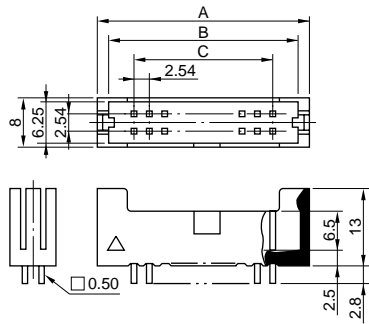


2. Power connector integrated type



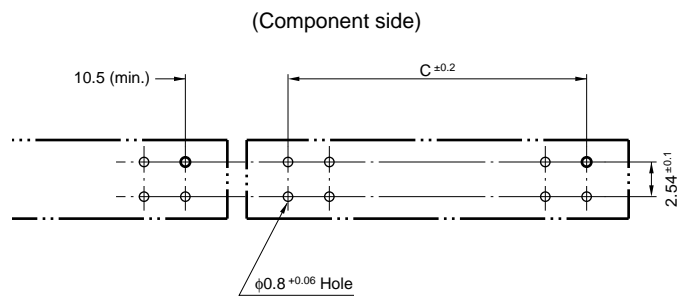
STRAIGHT PLUG (WITH SIMPLIFIED LATCH)

■ DIMENSIONS



Unit: mm (in.)

■ MOUNTING HOLE LAYOUT



Unit: mm (in.)

■ PART NUMBERS AND DIMENSIONS

| Number of contacts | Part number | Mini header | | |
|--------------------|------------------|-----------------------------|-------|-------|
| | | Dimensions (unit: mm (in.)) | | |
| | | A | B | C |
| 10 | FCN-744P010-AU/R | 20.12 | 17.72 | 10.16 |
| 14 | FCN-744P014-AU/R | 25.20 | 22.80 | 15.24 |
| 16 | FCN-744P016-AU/R | 27.74 | 25.34 | 17.78 |
| 20 | FCN-744P020-AU/R | 32.82 | 30.42 | 22.86 |
| 24 | FCN-744P024-AU/R | 37.90 | 35.50 | 27.94 |
| 26 | FCN-744P026-AU/R | 40.44 | 38.04 | 30.48 |
| 30 | FCN-744P030-AU/R | 45.52 | 43.12 | 35.56 |
| 34 | FCN-744P034-AU/R | 50.60 | 48.20 | 40.64 |