

# **Micro-TCA Card Edge Connectors**

# FULLY COMPLIANT CONNECTOR FOR ADVANCED MC™ MODULES

Micro-TCA (µTCA) vertical card edge connectors provide 170 contacts on a 0.75mm pitch and enable advanced MC™ modules to be plugged directly to a backplane. Micro-TCA card edge connector's conventional press-fit or surface mount assembly and connector designs require no costly hardware, resulting in low total applied cost.

- Up to 18Gb/s data rate per lane
- Press-fit and SMT version are available
- Modules can be plugged directly to the backplane



#### **FEATURES**

- Vertical card edge connectors with 170 contacts on a 0.75mm pitch
- Press-fit and SMT version are available
- No secondary mechanical retention or compensating board stiffeners needed
- Very low loss and crosstalk for low voltage differential signaling
- Surface mount mechanical hold-downs
- RoHS compliant and lead-free

#### **BENEFITS**

- Fully compliant with Micro-TCA specification
- Provides a solderless alternative for termination to thick PCBs
- Low total applied cost
- Allows data rates up to 18Gb/s
- Provide additional mechanical strength after soldering
- Meets environmental, health and safety standards

## ▶ Micro-TCA Card Edge Connectors

### TECHNICAL INFORMATION

#### **MATERIAL**

• Contact Base Metal: Copper alloy

• Contact Area Finish: Gold over nickel

• Solder Area Finish: Tin over nickel or tin-lead over nickel

• Metal Board Locks: Copper alloy

#### **ELECTRICAL PERFORMANCE**

Contact Resistance:

• Initial:  $25m\Omega$  max.

• Variation: Less than  $10m\Omega$  max.

• Current Rating: 0.5A min. per pin

Voltage Rating: 12V AC (rms)

#### **MECHANICAL PERFORMANCE**

• Durability: Up to 500 mating cycles

• Insertion Force: 100N max. for whole connector

• Withdrawal Force: 65N max. for whole connector

#### **ENVIRONMENTAL**

• Salt Spray: Contact Resistance 35 $\Omega$  max. final)

• Thermal Shock: Contact Resistance (35 $\Omega$  max. final)

Solderability: 90% of immersed area must show no voids and pin holes

#### **APPROVALS AND CERTIFICATIONS**

• UL

#### **SPECIFICATIONS**

- Amphenol Product Specification:
- GS-12-1132 for High Speed Micro-TCA 18G Press-fit IMLA type connector
- GS-12-422 for Micro TCA 6.25G Press-fit IMLA type connector
- GS-12-362 for Micro TCA 6.25G SMT type connector
- Industry Specification:
  - PICMG® specification MTCA.0 R1.0

#### **PACKAGING**

Tray

#### **TOOLING INFORMATION**

Tooled Up

#### **TARGET MARKETS/APPLICATIONS**



Switches Routers Network Interface Cards (NICs) Host Bus Adapters (HBAs)



Servers Storage Systems Storage Controller Cards

# **Mouser Electronics**

**Authorized Distributor** 

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## FCI / Amphenol:

10084423-103LF 10058835-1000LF 10058831-110LF 10084423-101LF 10084423-102LF 10058831-111LF 10058835-1001LF 10084423-201LF 10058835-1002LF 10084423-203LF 10084423-903LF 10084423-202LF 10084423-902LF 10058835-1003LF 10058831-210LF 10058831-211LF 10123277-902LF 10084423-901LF