

CONAN®

High Density, Low Profile 1.00mm Pitch Mezzanine Connectors

C - Series for Demanding Commercial Electronics Applications

DESCRIPTION

The Conan 1.0mm mezzanine connector system provides a mechanically secure, high density electrical interface between parallel printed circuit boards.

Conan's mechanical features and palladium/nickel/gold plated electrical contacts qualify it for high reliability use in durable commercial electronic equipment and instruments.



FEATURES & BENEFITS

- "Snap" engagement contacts assure secure mating with an audible "click"
- Blade-on-beam contact design allows "peeling" disengagement and prevents contact stubbing
- Connector housings feature "lead-in" angles to assist in mating
- Surface mounted metal hold-downs reinforce connector retention to the printed circuit board
- Mating polarization prevents backward connections
- ▶ PCB polarization prevents errors during printed circuit board assembly
- ▶ Pick and place caps with tape and reel packaging support automated assembly processes
- ► Header height options support a range of PCB stack heights: 4.15mm to 7mm
- 9 part sizes: 9 to 69 contacts
- Lead-free RoHS compatible products satisfy environmental regulations

TARGET MARKETS / APPLICATIONS

- Portable meters / instruments
- Medical diagnostics
- Point-of-sale equipment, scanning
- Machine-to-Machine (M2M)
- Energy controllers / modules / displays
- Communications and networking equipment
- Electronic security
- Office equipment



FC

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MATERIALS

- Contact base metal
 - Header: Phosphor bronze
- Receptacle: Copper Alloy, High Spring
- Contact area finish: gold or GXT
- Solder area finish: Pure tin over 1.27um (50uin.) nickel
- ► Housing material: Cream-colored LCP (UL 94V-0)

ELECTRICAL PERFORMANCE

- ightharpoonup Insulation resistance: 1000 M $m \Omega$ min
- Contact resistance: 30 mΩ max
- Withstanding voltage: 500 V ac, rms, 60 Hz
- Current rating: 1.0 amp continuous (per contact, all contacts powered)
- Signal Integrity (differential pairs, connector only)
 - Impedance: 100Ω +/- 10% @ 50 ps edge (10-90%)
 - Insertion Loss: < 1dB to 5GHz
 - NEXT: ≤3.5% for a 50 ps edge (10-90%)
 - FEXT: ≤2.5% for a 50 ps edge (10-90%)

MECHANICAL PERFORMANCE

- ► Mating force: 125g per contact max
- Unmating force: 25g per contact min
- Retention force (connector to PCB): 44 N (10lbf) min
- Contact wipe: 0.64mm (0.025 in.)
- Durability: 30 mating cycles

ENVIRONMENTAL PERFORMANCE

- ► IMFG per EIA 364-65 class 2a without SO₂, 20 days mated
- ► High temperature life 105°C

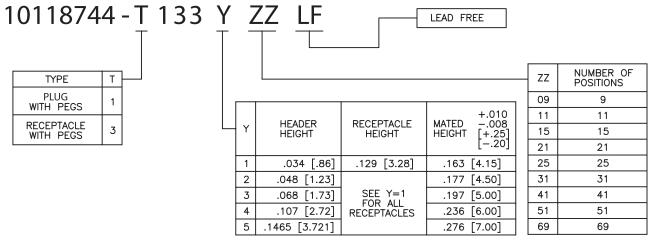
SPECIFICATIONS

GS-12-0977

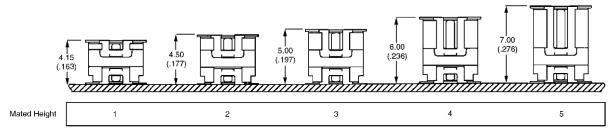
PACKAGING

Tape and reel with vacuum pickup caps

PART NUMBERS



For additional configurations and packaging please consult print 91900 at www.fciconnect.com



Mated connector max.width: .220" (5.59mm)