

PRODUCT GUIDE

SOLDIER SYSTEMS



The new standard in push-pull connectors
developed specifically for harsh-environments



MIL-PP

Push-Pull Connectors

Series ABSC



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HOW CAN I HELP?

Soldier-worn connector

PUSH-PULL CONNECTORS MIL-PP

TT Electronics has introduced its most advanced rugged high speed data connector, targeted at harsh environment, wearable and man-portable electronic systems. The MIL-PP family of micro push-pull connectors saves up to 35% weight and space over its nearest equivalent and has been developed following feedback from end users.

This range of connectors from TT Electronics offers tactile blind mate-able key-keyway engagement, environmental sealing to IP68 and a range of ultrahigh density insert arrangements for signal and data including USB, Ethernet and RS232 systems. Includes patented Delta-Clip retention system.

✓ Ultra high-pitch contact density, up to 30 ways

✓ High-speed data capability, inc USB and Ethernet

✓ Positive, blind mateable, key-keyway engagement system

✓ RoHS, Reach and WEEE compliant

✓ Fully environmentally sealed

✓ Robust design for the most demanding environments

✓ Fully scoop-proof, to prevent accidental contact damage

✓ Low-lustre, non-reflective, black finish



Specifications

MIL-PP Connectors

Materials

- Shells: aluminium alloy (aerospace grade)
- Insulators: rigid polymer
- Contacts: copper alloy

Environmental Ratings

- Temperature range: -55 to +125°C
- Vibration: 16hrs random
- Sealing: IP68 mated
- Salt spray: 1000 hours

Standard Plating Finishes

- Metal parts: non-reflective black finish (RoHS compliant)
- Contacts: gold

Environmental Characteristics

- Insulation resistance: 30,000Mohms
- Dielectric withstand voltage: 750v AC
- Current rating: 3amps @ 40°C
- Contact resistance <5m ohm
- Shell to shell continuity <5m ohm
- Recommended max wire size is 24AWG

Mechanical Features

- Coupling: push pull, blind mating
- Keying: 5 orientations available
- Contact type: solder and PCB pins
- Contact retention: assembled and injection moulded in position
- Endurance: 5000 operations minimum

Fast Facts

MIL-PP Push-Pull Connectors



Ultra-light weight, compact construction, high density push-pull connector family. Extremely robust for the most challenging field conditions; water tight, excellent EMC properties, and non-reflective finish, make it ideal for all soldier-borne and man-portable defence applications.

MARKET SEGMENTS

- Headsets
- Radio communications
- Head up displays
- PDAs
- Targeting systems
- Range finders
- Helmet systems
- Battery systems

FEATURES

- Fully scoop proof
- Sealed to IP68 mated and unmated
- Positive key-keyway engagement system
- Non-latching retention system
- Aerospace grade aluminium construction
- RoHS compliant non-reflective black finish
- Patented Delta clip retention system

OUR ADVANTAGES

- Lightest connector of its type – 35% saving over nearest equivalent, for when 'every ounce counts'
- Easy, secure, and tactile mating-unmating, even in blind mate situations
- No coil spring to get clogged with debris
- High speed data compatible with USB2.0 and Ethernet
- Ergonomic overmould for maximum environmental performance and easy handling
- Excellent EMC properties provide zero electronic field signature
- Supplied as harness solution, or with flexi PCB
- The easiest to assemble, push pull connector!

For our full product portfolio, in-house and local design support / distribution partners, visit:

www.ttelectronics.com/connectors





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