

PV[®] Wire-to-Board and Wire-to-Wire Connector System

VERSATILE DESIGN FOR DEMANDING APPLICATIONS

Amphenol's PV[®] solution is a versatile and modular system able to meet all the board-to-board, board-to-wire, and wire-to-wire applications where high density outstanding electrical and mechanical performances are required.

- Unique dual-metal PV[®] receptacle contact ensures durability up to 1000 cycles
- Beryllium copper spring ensures high normal force at the mating interface
- Polarized mating geometry to prevent mismatching
- Keyed MINI-LATCH housings provide polarization to prevent mismating



TARGET MARKETS



FEATURES

- Unique dual-metal PV[®] receptacle contact
- Beryllium copper spring
- Keyed MINI-LATCH housings
- Brass contact body
- Choice of three different spring pressures
- Shrouded header side walls engage with the sides of the MINI-LATCH housing
- Two wall header design
- RoHS compliant and lead-free

BENEFITS

- Ensures durability up to 1000 cycles
- High normal force during mating interface
- Provide polarization to prevent mismating
- Reliable, gas-tight crimp termination
- Allows the user to customize insertion and withdrawal forces to specific application requirements
- Provides additional retention
- Provides mechanical benefits
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Contact Material:
 - PV® Wire Terminals: Brass body and Beryllium Copper spring
 - PCB Headers: Phosphor Bronze
- Contact Plating:
 - PV® Wire Terminals: Gold or Lead-free pure Tin over Nickel
 - PCB Headers: Gold or GXT® (Palladium-Nickel with Gold flash) or Lead-free pure Tin over Nickel
- Housing Material:
 - MINI-LATCH Housings: Modified polyphenylene oxide UL94V-0
 - Shrouded PCB Headers: Glass filled Nylon UL94V-0
- RoHS Information: All parts with “LF” suffix are RoHS compliant

APPROVALS AND CERTIFICATION

- UR E66906
- CSA LR46923

SPECIFICATION

- Product Specification:
 - BUS-12-067 (PV® and MINI-LATCH wire connectors)
 - BUS-12-075 (Shrouded PCB headers)
- Application Drawings: TA-75, TA-146, TA-531

ELECTRICAL PERFORMANCE

- Current Rating Single Circuit: 3.0A with 32AWG wire; larger wires allow more; all applications require de-rating
- Withstanding Voltage: 1000V RMS
- Insulation Resistance, Wire Connector: >10000MΩ
- Insulation Resistance, PCB Header: >5000MΩ
- Contact Resistance (LLCR), Wire Connector: <2mΩ
- Mating Force (individual contact max.)
 - High Force Spring: 450g
 - Ultra-high Force Spring: 1100g
- Un-mating force (individual contact min.)
 - High Force Spring: 75g
 - Ultra-high Force Spring: 175g
- PV® Contact Retention in MINI-LATCH Housing: 4lbs per contact
- Durability: 1000 mating cycles
- Temperature: -40°C to +105°C

TARGET MARKETS/APPLICATIONS



Automotive



Industrial



Consumer



Data



Industrial & Instrumentation



Medical

▶ PV® Wire-to-Board and Wire to wire Connector System

MINI-LATCH RECEPTACLE HOUSINGS

0.100in. / 2.54mm pitch

SINGLE ROW, POLARIZED, 78211 SERIES

Range: 03 to 15 positions



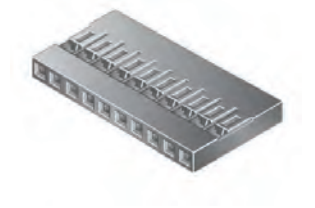
DOUBLE ROW, POLARIZED, 65846 SERIES

Range: 04 to 72 positions



SINGLE ROW, 65039 SERIES

Range: 01 to 36 positions



DOUBLE ROW, 65043 SERIES

Range: 04 to 72 positions



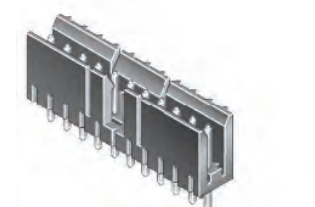
Maximum wire diameter for use in these housings is 1.52mm

SHROUDED PCB HEADERS

0.100in. / 2.54mm pitch

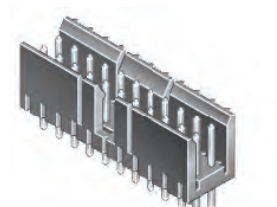
SINGLE ROW, VERTICAL, 69167 SERIES

Range: 03 to 15 positions



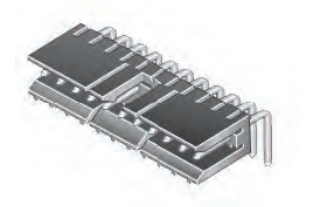
DOUBLE ROW, VERTICAL, 69168 SERIES

Range: 06 to 30 positions



SINGLE ROW, 78208 SERIES

Range: 03 to 15 positions



DOUBLE ROW, 78207 SERIES

Range: 06 to 30 positions

