

JST XA Series 2.5mm Connectors (Cont.)



| Fig. | Circuits | Dimensions - mm | | Digi-Key Part No. | Cut Tape Pricing | | Tape & Reel Pricing 500 | JST Part No. |
|----------------------------|----------|-----------------|------|-------------------|------------------|-------|-------------------------|-----------------------|
| | | A | B | | 1 | 10 | | |
| Headers | | | | | | | | |
| SMT Type (Shrouded) | | | | | | | | |
| 4 | 2 | 2.5 | 10.0 | 455-2022-1-ND | .58 | 5.41 | 180.19 | BM02B-XASS-TF(LF)(SN) |
| | 3 | 5.0 | 12.5 | 455-2023-1-ND | .73 | 6.74 | 224.78 | BM03B-XASS-TF(LF)(SN) |
| | 5 | 10.0 | 17.5 | 455-2024-1-ND | .84 | 7.78 | 259.55 | BM05B-XASS-TF(LF)(SN) |
| | 6 | 12.5 | 20.0 | 455-2025-1-ND | .92 | 8.46 | 282.21 | BM06B-XASS-TF(LF)(SN) |
| | 7 | 15.0 | 22.5 | 455-2026-1-ND | 1.10 | 10.15 | 338.49 | BM07B-XASS-TF(LF)(SN) |
| | 8 | 17.5 | 25.0 | 455-2027-1-ND | 1.15 | 10.54 | 351.39 | BM08B-XASS-TF(LF)(SN) |
| | 9 | 20.0 | 27.5 | 455-2028-1-ND | 1.19 | 10.93 | 364.47 | BM09B-XASS-TF(LF)(SN) |
| | 13 | 30.0 | 37.5 | 455-2029-1-ND | 1.51 | 13.92 | 463.83 | BM13B-XASS-TF(LF)(SN) |

For Tape and Reel part number, change 1-ND to 2-ND.

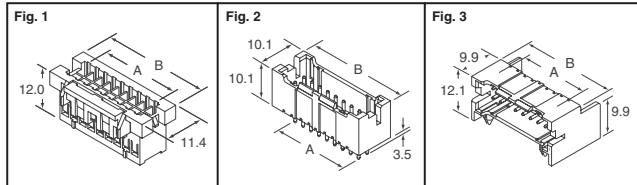
| Description | Digi-Key Part No. | Cut Tape Pricing | | Tape & Reel Pricing 8,000 | JST Part No. |
|------------------------------|-------------------|------------------|-----|---------------------------|-------------------|
| | | 1 | 100 | | |
| Contacts - Tin Plated | | | | | |
| 26 - 22 AWG | 455-2050-1-ND | .02 | .20 | 1.68 | SXA-001T-P0.6L(N) |
| 24 - 20 AWG | 455-2051-1-ND | .02 | .20 | 1.68 | SXA-01T-P0.6 |
| Hand Crimp Tools | | | | | |
| 22 - 26 AWG | 455-2045-ND | 373.62/1 | | — | WC-691 |
| 20 - 24 AWG | 455-2046-ND | 453.55/1 | | — | WC-700M |
| 20 - 24 AWG | 455-2049-ND | 1020.08/1 | | — | YRS-692 |

For Tape and Reel part number, change 1-ND to 2-ND.

XAD Series 2.5mm Connectors



Features: • Locking device prevents accidental disconnection • Solder crack preventive material • Mis-insertion preventative design
Specifications: • Current Rating: 3A AC/DC (20 AWG) • Voltage Rating: 250V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 28 - 20 AWG



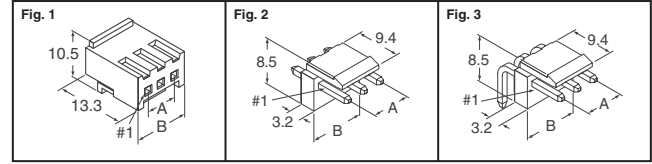
| Fig. | Circuits | Dimensions (mm) | | Digi-Key Part No. | Pricing | | JST Part No. | |
|------------------------------|-----------------------------|-----------------|------|-------------------|---------|-------|----------------------|--|
| | | A | B | | 1 | 100 | | |
| Housing | | | | | | | | |
| 1 | 8 | 7.5 | 14.7 | 455-2162-ND | .20 | 1.85 | XADRP-08V | |
| | 10 | 10.0 | 17.2 | 455-2163-ND | .20 | 1.88 | XADRP-10V | |
| | 12 | 12.5 | 19.7 | 455-2164-ND | .21 | 1.92 | XADRP-12V | |
| | 14 | 15.0 | 22.2 | 455-2165-ND | .22 | 1.96 | XADRP-14V(P) | |
| | 16 | 17.5 | 24.7 | 455-2166-ND | .22 | 2.00 | XADRP-16V(P) | |
| | 18 | 20.0 | 27.2 | 455-2167-ND | .22 | 2.03 | XADRP-18V | |
| | 20 | 22.5 | 29.7 | 455-2168-ND | .22 | 2.07 | XADRP-20V | |
| | 22 | 25.0 | 32.2 | 455-2169-ND | .23 | 2.11 | XADRP-22V | |
| | 24 | 27.5 | 34.7 | 455-2170-ND | .23 | 2.15 | XADRP-24V(P) | |
| | 26 | 30.0 | 37.2 | 455-2171-ND | .24 | 2.20 | XADRP-26V | |
| | 28 | 32.5 | 39.7 | 455-2172-ND | .24 | 2.23 | XADRP-28V | |
| | 30 | 35.0 | 42.2 | 455-2174-ND | .25 | 2.27 | XADRP-30V(P) | |
| | 34 | 40.0 | 47.2 | 455-2173-ND | .26 | 2.34 | XADRP-34V | |
| | 40 | 47.5 | 54.7 | 455-2175-ND | .26 | 2.45 | XADRP-40V | |
| | Headers | | | | | | | |
| | Top Entry (Shrouded) | | | | | | | |
| 2 | 8 | 7.5 | 15.0 | 455-1997-ND | .40 | 3.72 | B08B-XADSS-N(LF)(SN) | |
| | 10 | 10.0 | 17.5 | 455-2002-ND | .46 | 4.20 | B10B-XADSS-N(LF)(SN) | |
| | 14 | 15.0 | 22.5 | 455-2008-ND | .53 | 4.92 | B14B-XADSS-N(LF)(SN) | |
| | 18 | 20.0 | 27.5 | 455-2011-ND | .64 | 5.89 | B18B-XADSS-N(LF)(SN) | |
| | 20 | 22.5 | 30.0 | 455-2014-ND | .66 | 6.13 | B20B-XADSS-N(LF)(SN) | |
| | 26 | 30.0 | 37.5 | 455-2019-ND | .86 | 7.89 | B26B-XADSS-N(LF)(SN) | |
| | 36 | 42.5 | 50.0 | 455-2020-ND | 1.23 | 11.30 | B36B-XADSS-N(LF)(SN) | |
| | 40 | 47.5 | 55.0 | 455-2021-ND | 1.39 | 12.88 | B40B-XADSS-N(LF)(SN) | |
| Side Entry (Shrouded) | | | | | | | | |
| 3 | 8 | 7.5 | 15.0 | 455-2031-ND | 1.25 | 11.56 | S08B-XADSS-N(LF)(SN) | |
| | 12 | 12.5 | 20.0 | 455-2033-ND | 1.35 | 12.52 | S12B-XADSS-N(LF)(SN) | |
| | 14 | 15.0 | 22.5 | 455-2034-ND | 1.50 | 13.86 | S14B-XADSS-N(LF)(SN) | |
| | 20 | 22.5 | 30.0 | 455-2035-ND | 1.90 | 17.55 | S20B-XADSS-N(LF)(SN) | |
| | 26 | 30.0 | 37.5 | 455-2036-ND | 3.12 | 28.72 | S26B-XADSS-N(LF)(SN) | |

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

VH Series 3.96mm Connectors



Features: • Reliable VH connector can be used in a wide variety of applications • Mounting height of 16.5mm • Lock mechanism prevents the connector from coming loose and prevents mis-insertion
Specifications: • Current Rating: 10A maximum AC/DC • Voltage Rating: 250V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 22 - 16 AWG • Color: Natural (White)



| Fig. | Circuits | Dimensions (mm) | | Digi-Key Part No. | Pricing | | | JST Part No. |
|----------------------------|-----------------------------|-----------------|-------|-------------------|---------|------|-------|-----------------|
| | | A | B | | 1 | 100 | 1000 | |
| Housing | | | | | | | | |
| 1 | 2 | 3.96 | 7.86 | 455-1183-ND | .06 | .55 | 4.61 | VHR-2N |
| | 3 | 7.92 | 11.82 | 455-1184-ND | .07 | .64 | 5.35 | VHR-3N |
| | 4 | 11.88 | 15.78 | 455-1185-ND | .09 | .82 | 6.81 | VHR-4N |
| | 5 | 15.84 | 19.74 | 455-1186-ND | .12 | 1.08 | 9.02 | VHR-5N |
| | 6 | 19.80 | 23.70 | 455-1187-ND | .13 | 1.16 | 9.70 | VHR-6N |
| | 7 | 23.76 | 27.66 | 455-1181-ND | .16 | 1.49 | 12.42 | VHR-7N |
| | 8 | 27.72 | 31.62 | 455-1188-ND | .17 | 1.54 | 12.84 | VHR-8N |
| | 9 | 31.68 | 35.58 | 455-1189-ND | .19 | 1.79 | 14.93 | VHR-9N |
| | 10 | 35.64 | 39.54 | 455-1187-ND | .22 | 2.05 | 17.08 | VHR-10N |
| | Headers | | | | | | | |
| Top Entry (locking) | | | | | | | | |
| 2 | 2 | 3.96 | 7.86 | 455-1639-ND | .11 | 1.06 | 8.81 | B2P-VH(LF)(SN) |
| | 3 | 7.92 | 11.82 | 455-1640-ND | .14 | 1.34 | 11.14 | B3P-VH(LF)(SN) |
| | 4 | 11.88 | 15.78 | 455-1641-ND | .18 | 1.71 | 14.29 | B4P-VH(LF)(SN) |
| | 5 | 15.84 | 19.74 | 455-1642-ND | .23 | 2.11 | 17.56 | B5P-VH(LF)(SN) |
| | 6 | 19.80 | 23.70 | 455-1643-ND | .26 | 2.40 | 20.04 | B6P-VH(LF)(SN) |
| | 7 | 23.76 | 27.66 | 455-1644-ND | .30 | 2.78 | 23.18 | B7P-VH(LF)(SN) |
| | 8 | 27.72 | 31.62 | 455-1645-ND | .36 | 3.32 | 27.67 | B8P-VH(LF)(SN) |
| | 9 | 31.68 | 35.58 | 455-1646-ND | .40 | 3.68 | 30.69 | B9P-VH(LF)(SN) |
| | 10 | 35.64 | 39.54 | 455-1647-ND | .43 | 4.01 | 33.47 | B10P-VH(LF)(SN) |
| | Side Entry (locking) | | | | | | | |
| 3 | 2 | 3.96 | 7.86 | 455-1648-ND | .14 | 1.24 | 10.38 | B2PS-VH(LF)(SN) |
| | 3 | 7.92 | 11.82 | 455-1649-ND | .17 | 1.56 | 13.03 | B3PS-VH(LF)(SN) |
| | 4 | 11.88 | 15.78 | 455-1650-ND | .22 | 2.08 | 17.34 | B4PS-VH(LF)(SN) |
| | 5 | 15.84 | 19.74 | 455-1651-ND | .28 | 2.56 | 21.34 | B5PS-VH(LF)(SN) |
| | 6 | 19.80 | 23.70 | 455-1652-ND | .33 | 3.03 | 25.20 | B6PS-VH(LF)(SN) |
| | 7 | 23.76 | 27.66 | 455-1653-ND | .37 | 3.40 | 28.39 | B7PS-VH(LF)(SN) |
| | 8 | 27.72 | 31.62 | 455-1654-ND | .44 | 4.06 | 33.83 | B8PS-VH(LF)(SN) |
| | 9 | 31.68 | 35.58 | 455-1655-ND | .48 | 4.46 | 37.20 | B9PS-VH(LF)(SN) |
| | 10 | 35.64 | 39.54 | 455-1656-ND | .53 | 4.91 | 40.92 | B10PSVH(LF)(SN) |

| Description | Digi-Key Part No. | Cut Tape Pricing | | | Tape and Reel Qty. | Pricing | JST Part No. |
|------------------------------|-------------------|------------------|-----|------|--------------------|---------|--------------|
| | | 10 | 100 | 500 | | | |
| Contacts - Tin Plated | | | | | | | |
| 20 - 16 AWG | 455-1319-1-ND | .06 | .50 | 4.13 | 3,500 | 27.43/M | SVH-41T-P1.1 |
| 22 - 18 AWG | 455-1133-1-ND | .05 | .46 | 3.78 | 4,500 | 25.08/M | SVH-21T-P1.1 |
| Crimp Tools | | | | | | | |
| 20 - 16 AWG | 455-1911-ND | 373.62/1 | | — | — | — | WC-930 |
| 22 - 18 AWG | 455-1134-ND | 373.62/1 | | — | — | — | WC-160 |

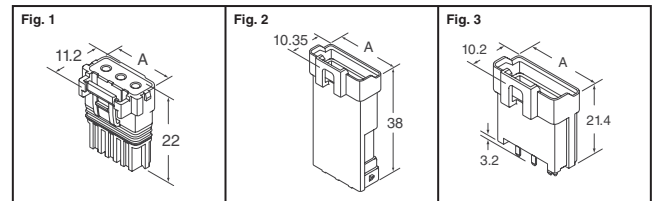
For Tape and Reel part number, change 1-ND to 2-ND.

WPJ Series Wire-to-Wire and Wire-to-Board Crimp Style Connectors



The new WPJ Series Wire-to-Wire and Wire-to-Board crimp style connector was designed for both extreme moisture and non-submersion applications. Major uses include automotive, appliance, underwater cameras or non-water resistance applications. Three different control key patterns prevent mis-mating while their unique terminal structure has been designed to withstand mating mistakes while maintaining the contact reliability. An inner lock housing feature prevents accidental disconnection to ensure connector mating integrity even under adverse conditions.

Specifications: • Current Rating: 7A AC/DC • Voltage Rating: 300V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 22 - 18 AWG • Insulation Resistance: 1,000MΩ minimum • Dielectric Voltage: AC 1,500/one minute • Insulation Diameter: Standard 2.32 - 2.83mm, Thin 1.52 - 2.03mm • Water-proof Grade: IPX7 • Pitch: 5.0mm
 Material: • Contacts: Copper alloy, tin-plated • Housings: PBT (Glass-filled) • Flammability: UL94V-0



| Fig. | Circuits | Dim. A (mm) | Key Pattern/Color* | Digi-Key Part No. | Pricing | | | JST Part No. |
|--|----------|-------------|--------------------|-------------------|---------|-------|-------|--------------------|
| | | | | | 1 | 10 | 100 | |
| Receptacle Housings | | | | | | | | |
| Waterproof Type for Standard Wire | | | | | | | | |
| 1 | 2 | 12.1 | 1/Natural | 455-2427-ND | 1.20 | 11.08 | 92.28 | 02R-WPJV-1-SMM(NN) |
| | 2 | 12.1 | 2/Red | 455-2428-ND | 1.20 | 11.08 | 92.28 | 02R-WPJV-2-RMM(NN) |
| | 2 | 12.1 | 3/Blue | 455-2429-ND | 1.20 | 11.08 | 92.28 | 02R-WPJV-3-EMM(NN) |

* Key Patterns/Colors do not intermate.

(Continued)