

SHORT LEAD TIMES SHORT LEAD TIMES www.fci.com/basicsleadtimes



Product Catalog



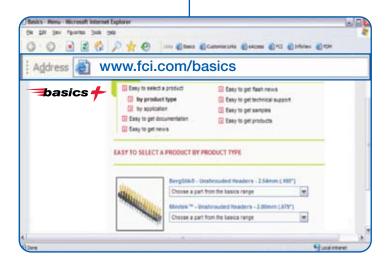
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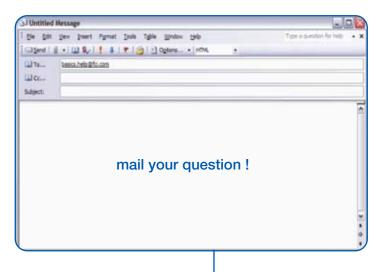


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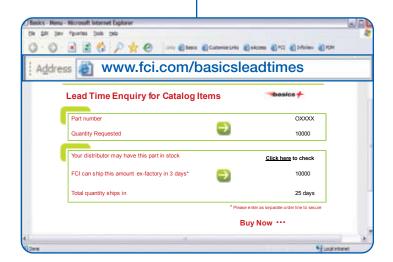
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NEED SOME PRODUCTION GRADE PARTS FOR YOUR PRE-SERIES?
PHONE OUR CUSTOMER SERVICE

■ UNSHROUDED HEADERS					
	BergStik® Unshrouded Headers 2.54mm (.100")				
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WHAT'S NEW?

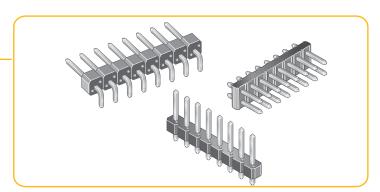




Pick an item from anywhere in the catalog. Most parts available to ship from our factory to you in 3 days.
Check online at www.fci.com/basics leadtimes

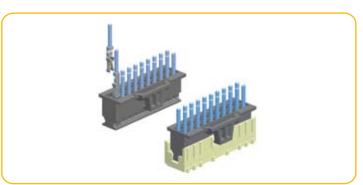
▶ Pin-in-Paste

Our new PiP range has been specifically designed to meet the requirements of this process, complete with paste stencil design Pages 56, 68



Minitek Active Latch

A latching crimp-to-wire system for demanding environments Pages 64, 74



Minitek Eject Latch Header

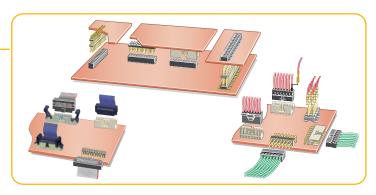
This ribbon cable connector mates securely, but can be unmated with no difficulty.

Pages 70, 76

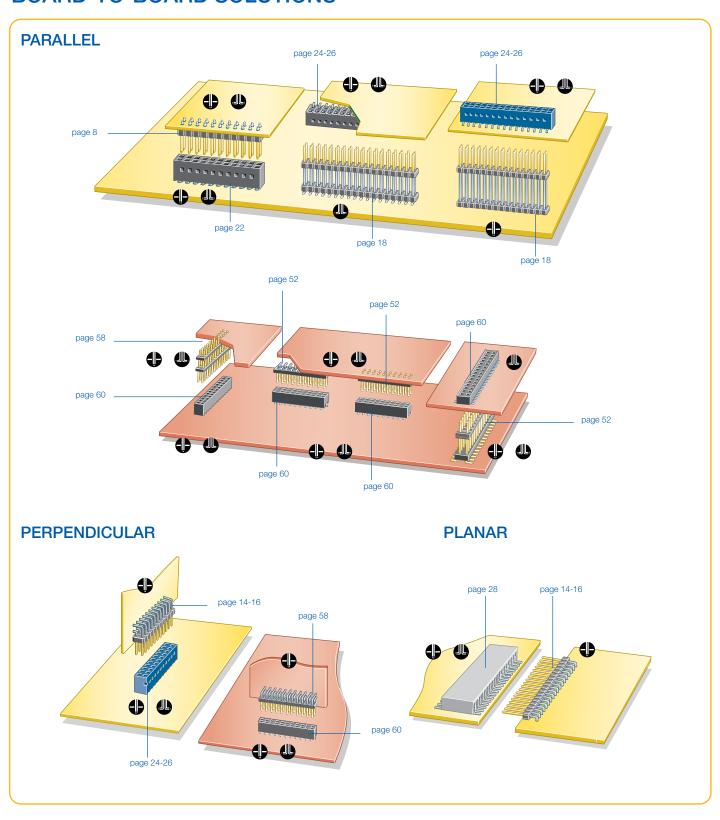


▶ The Minitek 2mm Modular System

Now the most complete and versatile system available: intermateable, high temperature compatible, low coplanarity and space saving Pages 52 – 76



BOARD-TO-BOARD SOLUTIONS



= 2.54 mm



= Through Mount

= 2.00 mm

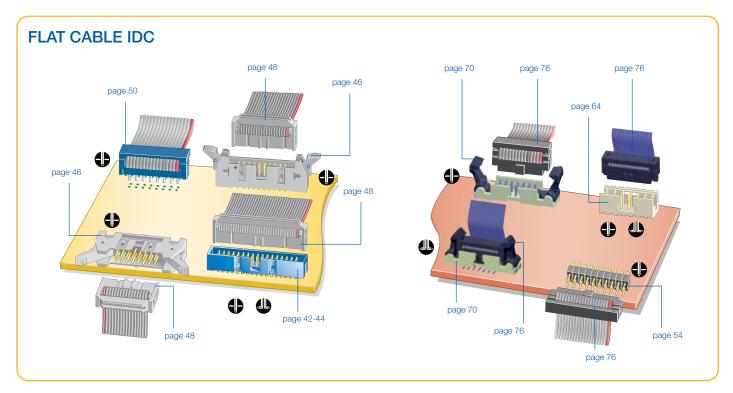


= Surface Mount

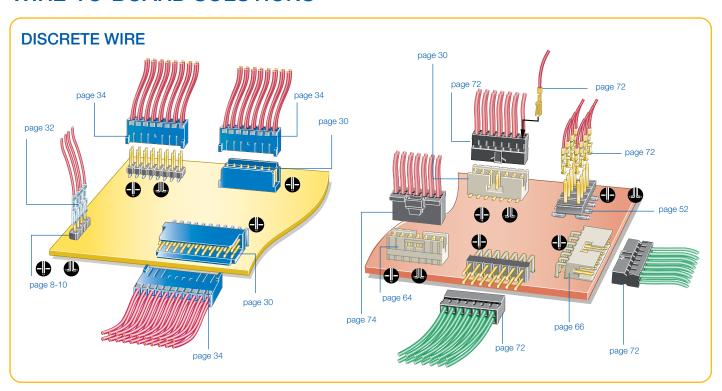


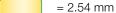


CABLE-TO-BOARD SOLUTIONS



WIRE-TO-BOARD SOLUTIONS





= 2.54 mm

= 2.00 mm

= Through Mount



= Surface Mount

TECHNICAL DATA

PHYSICAL

- ► Housing: High temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: 5000 M Ω min.
- Dielectric withstanding voltage: 1500 V

MECHANICAL PERFORMANCE

Pin retention to housing: 9 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

- Standard: Bags
- Optional: Tubes or

Tape-and-reel with pick-up cap

(SMT pin style 01 only)

REFERENCE INFORMATION

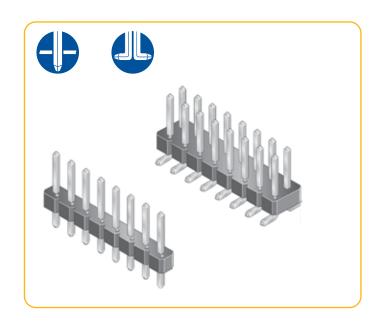
- File no. E66906
- File no. LR46923
- ► Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-114
- Tape and Reel packaging data: TA-840

PROCESSING INFORMATION

- Compatible with wave, vapor-phase, and (for SMT) IR reflow soldering processes
- Recommended IR profile TA 842 for SMT

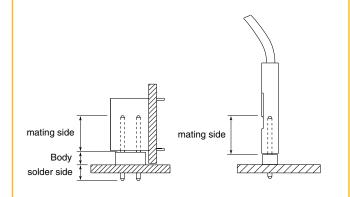
RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

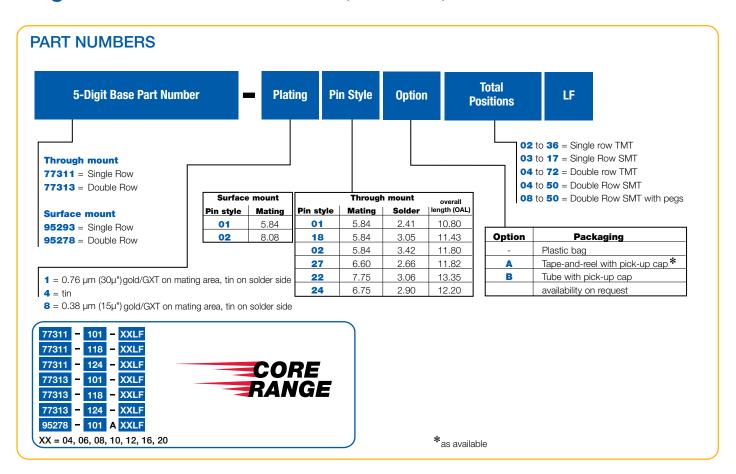
- Dubox[™] Crimp-to-wire contacts
 Dubox[™] Crimp-to-wire housings
 34
- Dubox[™] Vertical receptacles
 22
- Dubox[™] Low profile vertical receptacles 24, 26
- Dubox™ Horizontal receptacles 28
- Quickie™ IDC receptacles 48
- ► PVTM Crimp-to-Wire Contacts 38
- ► PV[™] Crimp-to-Wire Housings 40

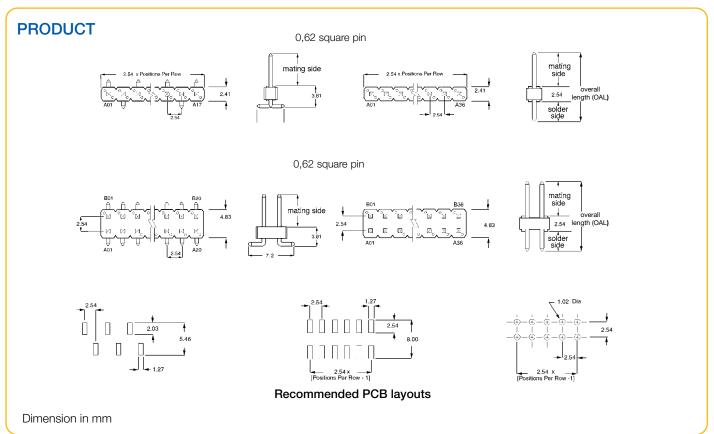






BergStik® Unshrouded Header, Vertical, Standard Sizes





TECHNICAL DATA

PHYSICAL

- ► Housing: High temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
 Insulation resistance: 5000 MΩ min.
 Dielectric withstanding voltage: 1500 V
- MECHANICAL PERFORMANCE
 - Pin retention to housing: 9 N min.
 - Retentive leg insertion force: >44.48 N max.
 - Retentive leg board retention: 2.22 N

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

■ Standard: Bags

Optional: Tubes or

Tape-and-reel with pick-up cap (SMT pin style 01 only)

REFERENCE INFORMATION

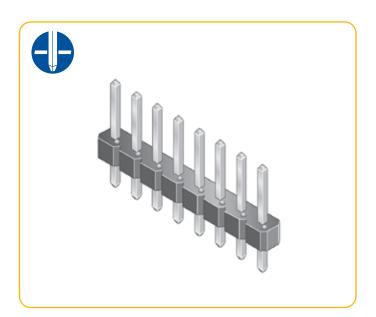
- File no. E66906
 File no. LR46923
- ► Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-114

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

 Dubox™ Crimp-to-wire contacts
 32

 Dubox™ Crimp-to-wire housings
 34

 Dubox™ Vertical receptacles
 22

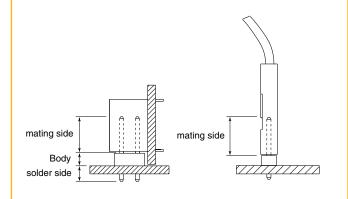
 Dubox™ Low profile vertical receptacles
 24, 26

 Dubox™ Horizontal receptacles
 28

 Quickie™ IDC receptacles
 48

 PV™ Crimp-to-Wire Contacts
 38

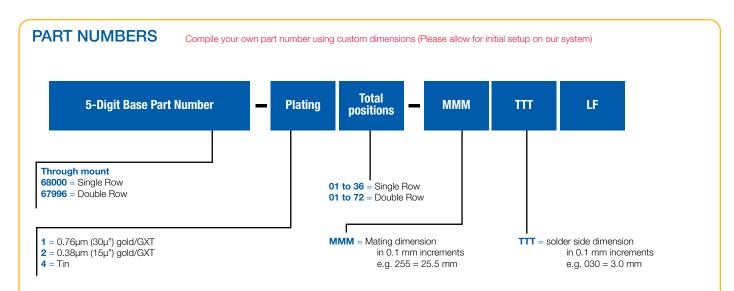
 PV™ Crimp-to-Wire Housings
 40







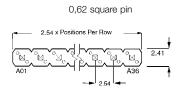
BergStik® Unshrouded Header, Vertical, Custom Sizes

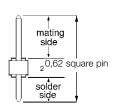


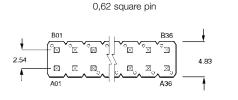
Note: 1. The total combined dimension for mating and solder side may not exceed 27 mm

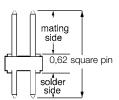
- 2. Standard packaging in bulk
- 3. Special packaging availability upon request

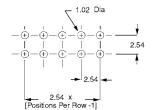
PRODUCT











Recommended PCB layouts

Dimension in mm

- Continuously molded and reeled
- High temperature plastic
- Various lengths cut from 1 part number
- Benchtop machine cuts, polarizes, and applies retentive leg

TECHNICAL DATA

PHYSICAL

- ► Housing: High temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: 5000 M Ω min.
- Dielectric withstanding voltage: 1500 V

MECHANICAL PERFORMANCE

Pin retention to housing: 9 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Reel

REFERENCE INFORMATION

- National E 1990
- File no. LR46923
- Product drawing: 54101 or 54102
- ► Product specification: BUS-12-059

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

 Dubox™ Crimp-to-wire contacts
 32

 Dubox™ Crimp-to-wire housings
 34

 Dubox™ Vertical receptacles
 22

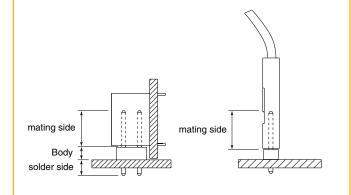
 Dubox™ Low profile vertical receptacles
 24, 26

 Dubox™ Horizontal receptacles
 28

 Quickie™ IDC receptacles
 48

 PV™ Crimp-to-Wire Contacts
 38

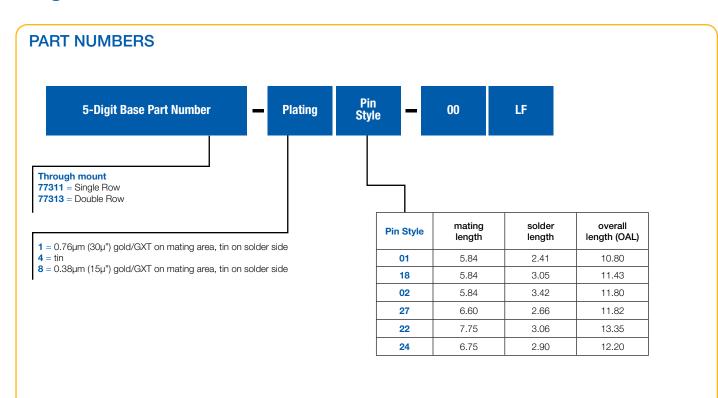
 PV™ Crimp-to-Wire Housings
 40

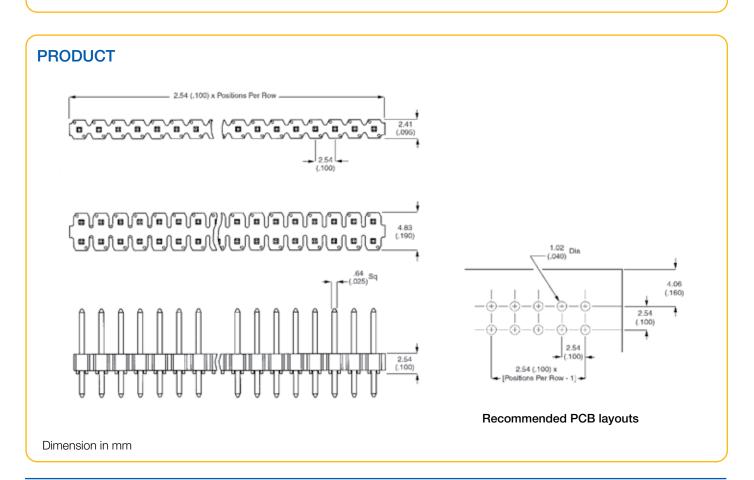






BergStik® Unshrouded Header, Continuous





- High temperature plastic
- Selective plating

TECHNICAL DATA

PHYSICAL

- ► Housing: High temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: 5000 M Ω min.
- Dielectric withstanding voltage: 1500 V

MECHANICAL PERFORMANCE

Pin retention to housing: 9 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Bags

REFERENCE INFORMATION

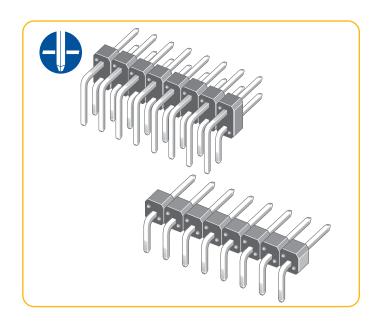
- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-114

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

 Dubox™ Crimp-to-wire contacts
 32

 Dubox™ Crimp-to-wire housings
 34

 Dubox™ Vertical receptacles
 22

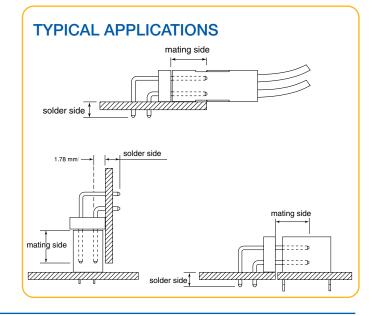
 Dubox™ Low profile vertical receptacles
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 Dubox™ Horizontal receptacles
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 Quickie™ IDC receptacles
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 PV™ Crimp-to-Wire Contacts
 38

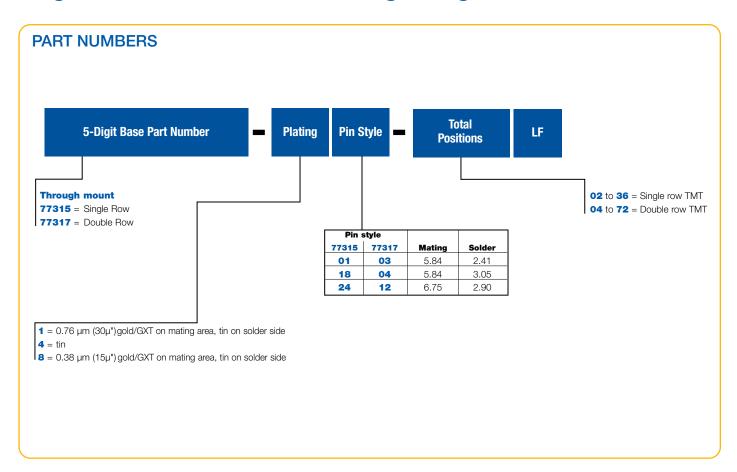
 PV™ Crimp-to-Wire Housings
 40

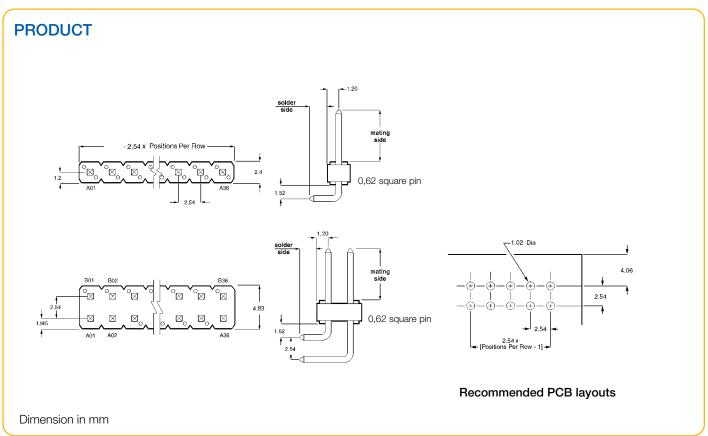






BergStik® Unshrouded Header, Right Angle, Standard Sizes





TECHNICAL DATA

PHYSICAL

- ► Housing: High temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

Current rating: 3 A continuous
 Insulation resistance: 5000 MΩ min.
 Dielectric withstanding voltage: 1500 V

MECHANICAL PERFORMANCE

- Pin retention to housing: 9 N min.
- ▶ Retentive leg insertion force: >44.48 N max.
- Retentive leg board retention: 2.22 N

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Bags

REFERENCE INFORMATION

File no. E66906
File no. LR46923

Product drawing: 55101 or 55102

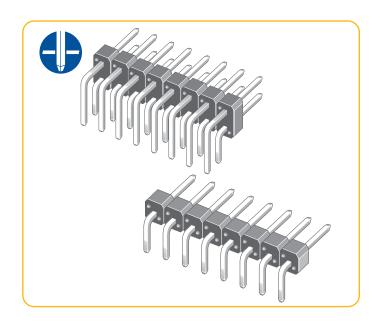
► Product specification: BUS-12-114

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

 Dubox™ Crimp-to-wire contacts
 32

 Dubox™ Crimp-to-wire housings
 34

 Dubox™ Vertical receptacles
 22

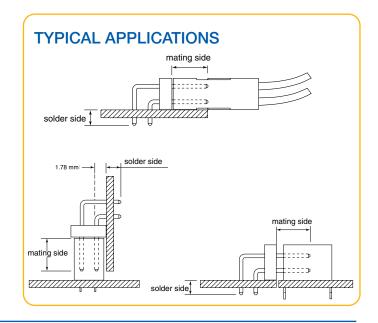
 Dubox™ Low profile vertical receptacles
 24, 26

 Dubox™ Horizontal receptacles
 28

 Quickie™ IDC receptacles
 48

 PV™ Crimp-to-Wire Contacts
 38

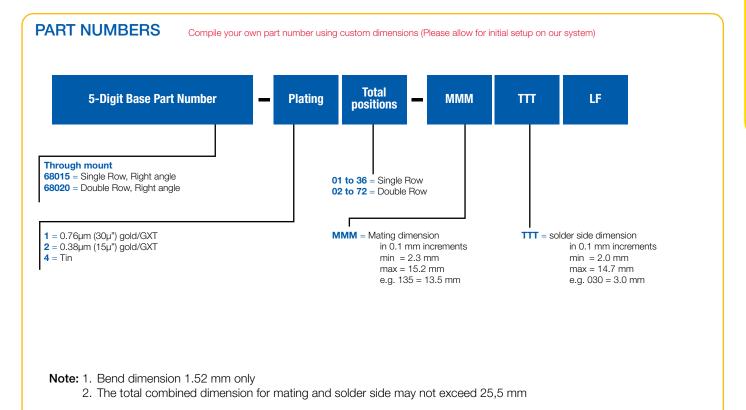
 PV™ Crimp-to-Wire Housings
 40



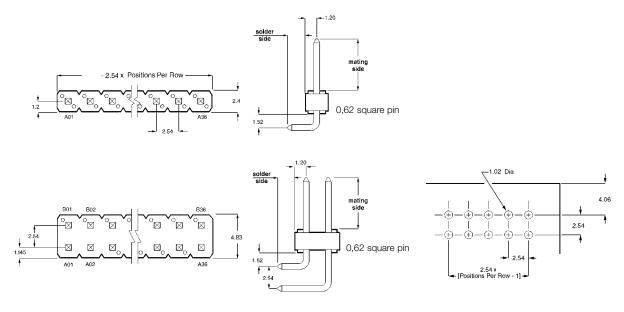




BergStik® Unshrouded Header, Right Angle, Custom Sizes



PRODUCT



Recommended PCB layouts

Dimension in mm

- ▶ Wide variety of stack heights in 0.5 mm increments
- High temperature plastic
- Selective plating

TECHNICAL DATA

PHYSICAL

- ► Housing: High temperature, black thermoplastic
- Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- Insulation resistance: 5000 MΩ min.
- Dielectric withstanding voltage: 1500 V

MECHANICAL PERFORMANCE

Pin retention to housing: 9 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Bags

REFERENCE INFORMATION

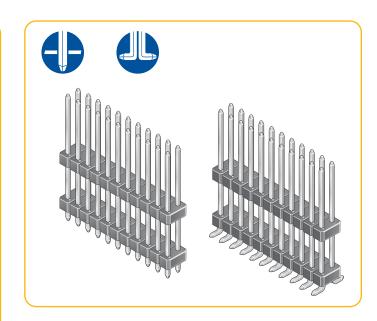
- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-114

▶ PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

RoHs INFORMATION

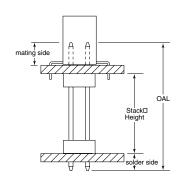
This product is RoHs compatible according to the European Union Directive 2002/95/IEC

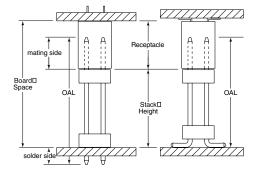


MATING DATA

- Dubox™ Vertical receptacles
- Dubox[™] Low profile vertical receptacles 24, 26

22

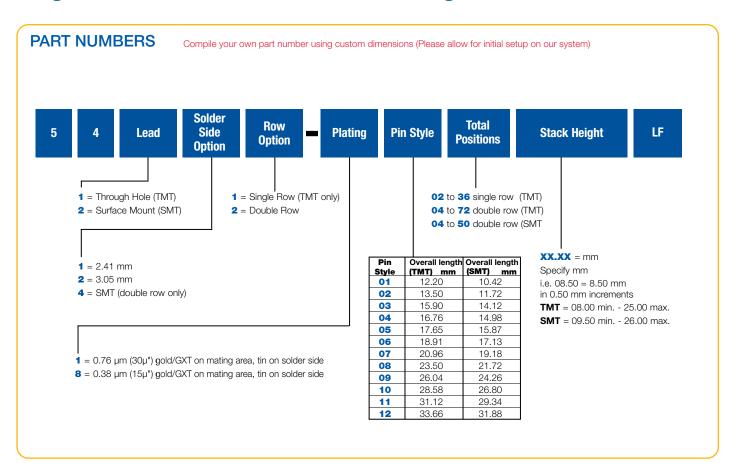




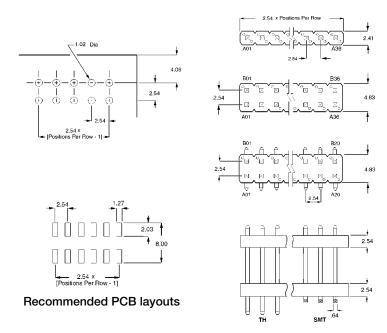




BergStik® Unshrouded Header, Stacking



PRODUCT



The board spacing

is the stack height of this header, plus the height of the receptacle (see application drawings on opposite page)

Dimension in mm

- Dual-beam contacts for added reliability
- Slotted cutout in low profile housing simplifies electrical testing
- Side-by-side and end-to-end stackable

TECHNICAL DATA

PHYSICAL

▶ Housing: Black thermoplastic

Flammability rating: UL 94 V-0

■ Contact: Phosphor-bronze

Plating: Gold or tin over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

Current rating: 2.5 A max. per contact

- ▶ Insulation resistance: 50,000 M Ω min.
- **▶** Contact resistance: 15 M Ω max. initial, 20 M Ω max. after environmental tests

Dielectric withstanding voltage: 800 V

MECHANICAL PERFORMANCE

Mating cycles (durability): 50-Gold, 25-Tin.

▶ Insertion force: 450 gf max. per gold contact

500 gf max. per tin-lead contact

Withdrawal force: 30 gf min. per gold contact

30 gf min. per tin-lead contact.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Plastic bags

REFERENCE INFORMATION

File no. E66906

File no. LR46923

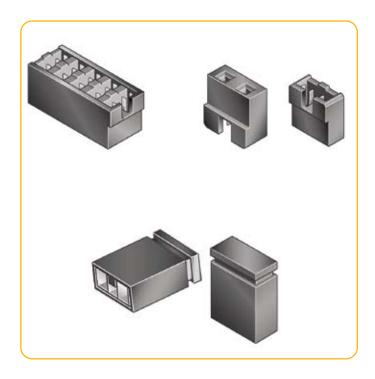
Product drawing: By 5-digit base part number

▶ Product specification: BUS-12-071-gold

BUS-12-070-tin

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

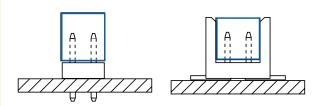
Continuous unshrouded headers 12

Unshrouded vertical headers 8, 10

■ Unshrouded right angle headers 1 14, 16

INSERTION DEPTH

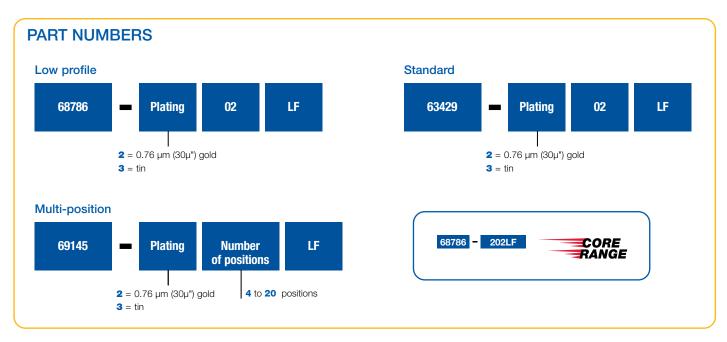
4.85 mm (.191") min.[provides 3.81 mm (.015") wipe] - Low profile

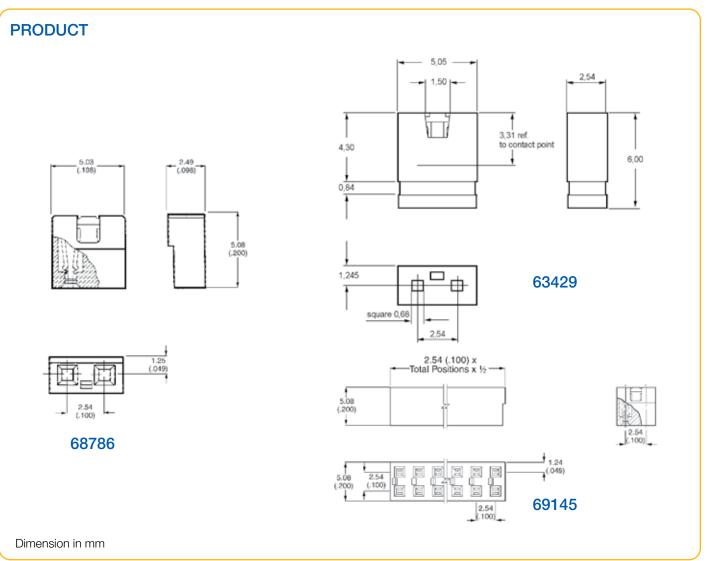






SHUNTS





- The Dubox™ contact has a pre-stressed, dual beam design to enable low insertion force
- ▲ 4-wall contact design for signal protection

TECHNICAL DATA

PHYSICAL

- ► Housing: Glass filled thermoplastic polyester, blue
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- ▶ Plating: Gold or tin in accordance with IEC 603-8I

ELECTRICAL PERFORMANCE

- Current rating: 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 15 M Ω max. initial, 20 M Ω max. after environmental tests
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

- ► Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150 gf) max.
- ▶ Withdrawal force per gold contact: 0.30 N (30 gf) min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Plastic boxes or tubes

PROCESSING INFORMATION

■ Compatible with wave soldering processes

REFERENCE INFORMATION

File no. E66906

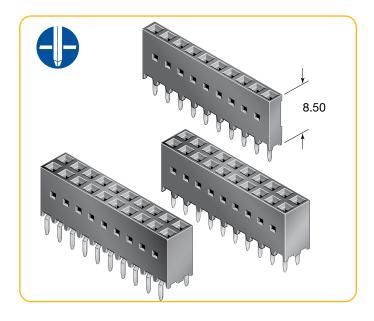
File no. LR46923

Product drawing: By 5-digit base part number

► Product specification: HE 13/14 and IEC 603-8

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



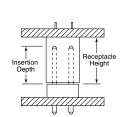
MATING DATA

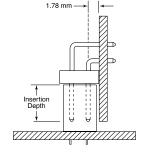
- BergStik® Unshrouded vertical headers 8, 10
- BergStik® Unshrouded right angle headers 14, 16
- BergStik® Unshrouded stacking headers 18
- BergStik® continuous Unshrouded headers 12

INSERTION DEPTH

- Top Entry: 3.6 mm min. to 6.81 mm max. [provides .381 mm wipe]
- Bottom Entry: 7 mm min. [provides .381 mm wipe] plus board thickness

TYPICAL APPLICATIONS



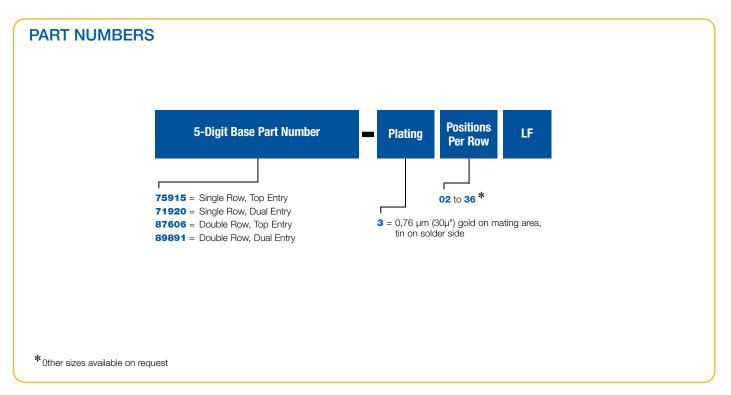


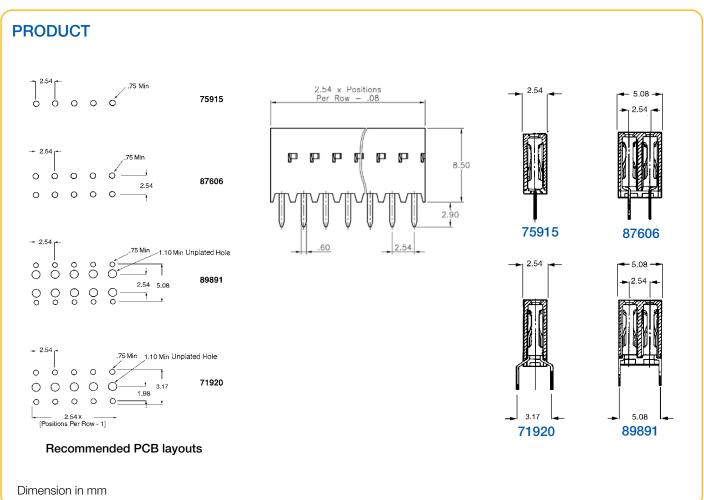
www.fci.com/basics





Dubox™ Vertical Receptacles





- The Dubox™ contact has a pre-stressed, dual beam design to enable low insertion force
- ▲ 4-wall contact design for signal protection

TECHNICAL DATA

PHYSICAL

- ► Housing: Glass filled thermoplastic polyester, blue
- Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 15 M Ω max. initial, 20 M Ω max. after environmental tests
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

- ► Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150 gf) max.
- ▶ Withdrawal force per gold contact: 0.30 N (30 gf) min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Plastic boxes or tubes

PROCESSING INFORMATION

■ Compatible with wave soldering processes

REFERENCE INFORMATION

File no. E66906

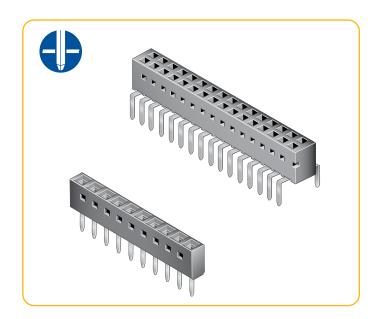
File no. LR46923

Product drawing: By 5-digit base part number

► Product specification: BUS-12-055

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ BergStik® Unshrouded vertical headers

■ BergStik® Unshrouded right angle headers 14, 16

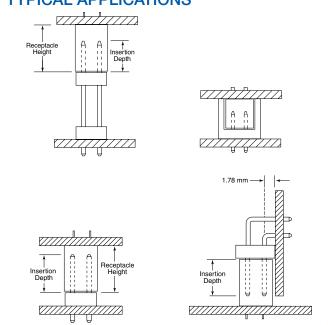
8, 10

■ BergStik® Unshrouded stacking headers 18

▶ BergStik® continuous Unshrouded headers

INSERTION DEPTH

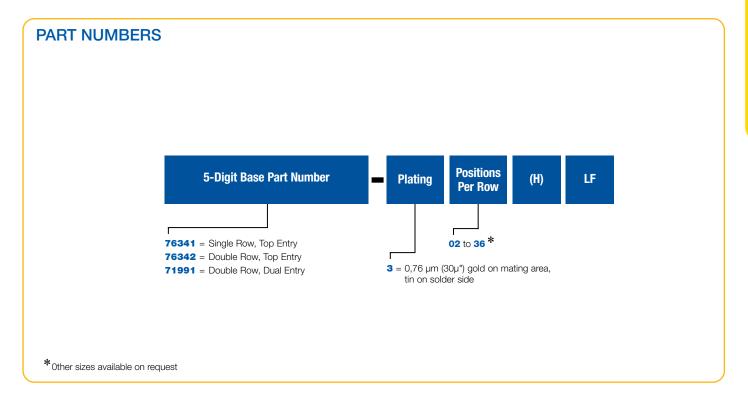
- Top Entry: 3.6 mm min. to 6.7 mm max. [provides .381 mm wipe]
- Bottom Entry: 6 mm min. [provides .381 mm wipe] plus board thickness





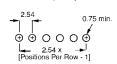


Dubox™ Vertical Receptacles, Low Profile



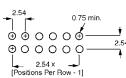
PRODUCT

P/N 76341 Top Entry

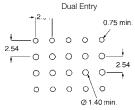


P/N 76342

Top Entry

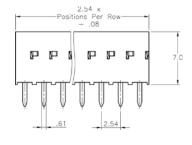


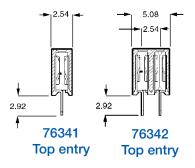
P/N 71991

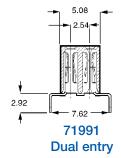


Recommended PCB layouts

Dimension in mm







- The Dubox™ contact has a pre-stressed, dual beam design to enable low insertion force
- ▲ 4-wall contact design for signal protection

TECHNICAL DATA

PHYSICAL

- Housing: High temperature body, grey
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



■ ELECTRICAL PERFORMANCE

- Current rating: 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 15 MΩ max. initial, 20 MΩ max. after environmental tests
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150 gf) max.
- ▶ Withdrawal force per gold contact: 0.30 N (30 gf) min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

- Plastic boxes or tubes
- Tape and reel as available

PROCESSING INFORMATION

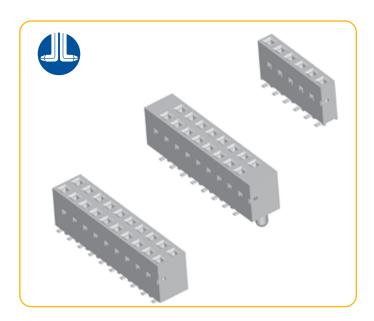
Compatible with vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-055

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC

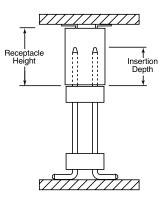


MATING DATA

- BergStik® Unshrouded vertical headers 8, 10
- ▶ BergStik® Unshrouded right angle headers 14, 16
- BergStik® Unshrouded stacking headers 18
- BergStik® continuous Unshrouded headers

INSERTION DEPTH

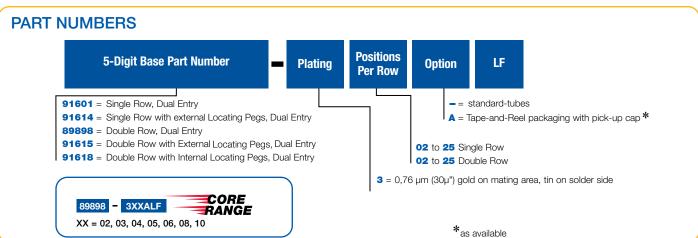
- ► Top Entry: 3.6 mm min. to 6.7 mm max. [provides .381 mm wipe]
- Bottom Entry: 6 mm min. [provides .381 mm wipe] plus board thickness

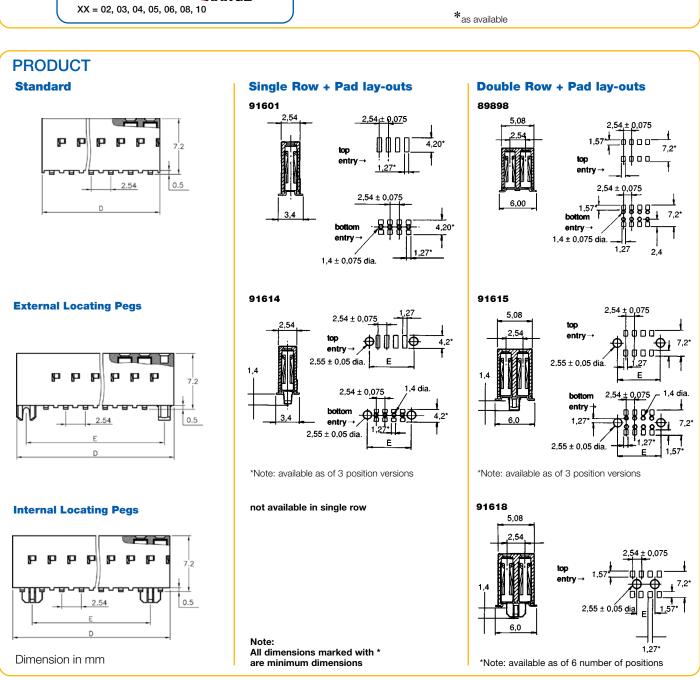






Dubox™ Vertical Receptacles, Low Profile





- The Dubox™ contact has a pre-stressed, dual beam design to enable low insertion force
- Floating solder tails self-center on circuit pads and assure coplanarity
- ▲ 4-wall contact design for signal protection

TECHNICAL DATA

PHYSICAL

- Housing: Blue thermoplastic -Through hole High temp. grey thermoplastic - Surface mount
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 15 M Ω max. initial, 20 M Ω max. after environmental tests
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150 gf) max.
- ▶ Withdrawal force per gold contact: 0.30 N (30 gf) min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Standard: Tubes

■ Optional: Tape-and-reel

PROCESSING INFORMATION

- Series 89882, 89883: compatible with wave soldering processes
- Series 71607, 71609: compatible with vapor-phase and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: 71607, 71609, 89882, 89883
- ▶ Product specification: HE 13/14 and IEC 603-8
- Application specification: TA-842 for SMT
- Tape and Reel packaging data : TA-856

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC





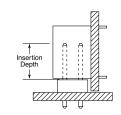


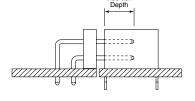
MATING DATA

- BergStik® Unshrouded vertical headers 8, 10
- BergStik® Unshrouded right angle headers 14, 16
- BergStik® continuous Unshrouded headers 12

INSERTION DEPTH

3,6 mm min. to 7.50 mm max. [provides .381 mm wipe]

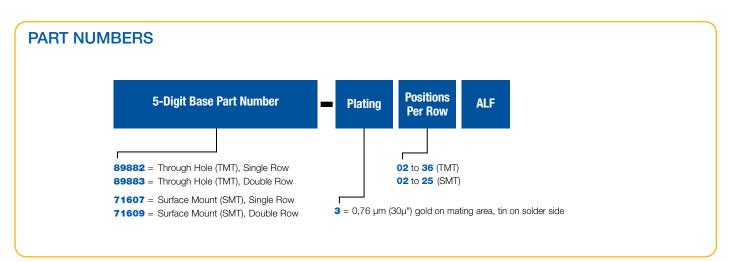


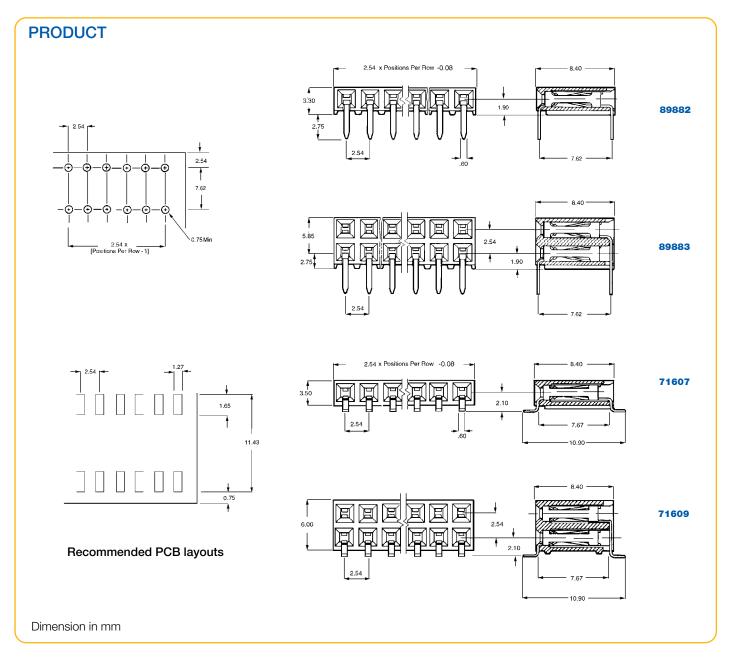






Dubox™ Horizontal Receptacles





- For use with Dubox™ crimp-to-wire housings
- Stackable end-to-end
- Passive latching, anti-reverse and anti-miss-match when used with Dubox™ crimp-to-wire housings
- Selective plating

TECHNICAL DATA

PHYSICAL

- Housing: Glass filled thermoplastic polyester
- ► Housing color for series 76382, 76383: blue Housing color for series 76384, 76385: black
- ► Flammability rating: UL 94 V-0
- Contact: copper Alloy
- ► Plating: Gold or tin over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

Contact retention to housing: 20 N min.

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

- ▶ 1x2 to 1x6 and 2x2 to 2x6: plastic bags
- Other in tube

▶ PROCESSING INFORMATION

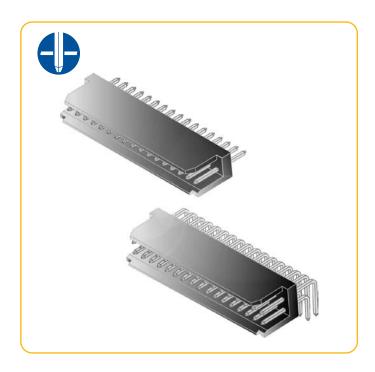
■ Compatible with wave soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- ▶ Product drawing: By 5-digit base part number
- ▲ Application specification: TA-531

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

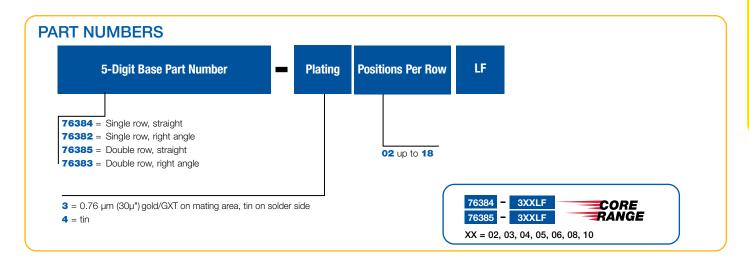
- Dubox[™] Crimp-to-wire contacts 32
- Dubox[™] Crimp-to-wire housings 34

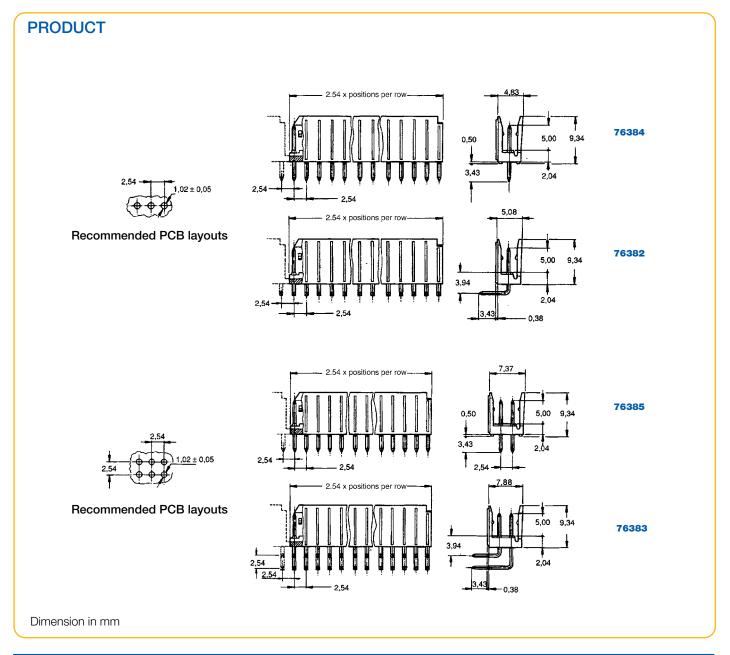
TYPICAL APPLICATIONS Insertion Depth Dept





Dubox™ Shrouded Headers





- The Dubox™ contact has a pre-stressed, dual beam design to enable low insertion force.
- Mates with very short pins (5 mm)
- Universal crimp barrel accomodates wires from AWG 22-30
- Selective plating

TECHNICAL DATA

PHYSICAL

- Contact: phosphor bronze
- Plating: 0.76 μm (30μ") Gold over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- Contact resistance after environmental test: 15Ω m max. – Contact
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

- Mating cycles (durability): 200 Gold
- Insertion force gold finish contact: 1.3 N
- ▶ Withdrawal force (min) gold finish contact: 0.3 N.
- contact retention force to housing: 15 N per contact.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

- 1Reels
- Boxes Loose piece

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-055
- Application specification: TA-317, TA-340

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC

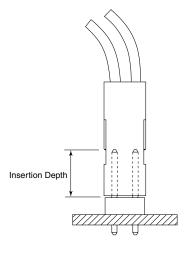


MATING DATA

- BergStik® unshrouded straight headers 8, 10
- BergStik® unshrouded right angle headers 14, 16
- Dubox[™] shrouded vert./ra. headers
- BergStik® continuous unshrouded headers 12

INSERTION DEPTH

- Discrete Wire: 3.6 mm min. to 5.6 mm max. [provides .381 mm wipe]
- Crimp-to-Wire Housing: 5.1 mm min. to 6.2 mm max. [provides .381 mm wipe in housing]







Dubox™ Crimp-to-Wire Contacts

PART NUMBERS

Part numbers / Contacts on Reel

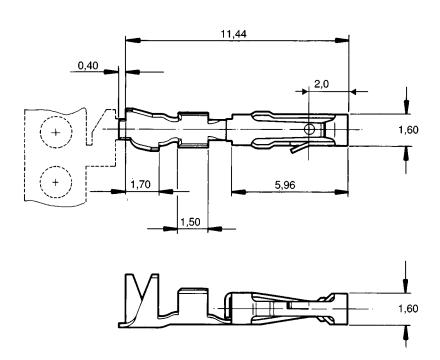
Wire size	insulation O.D.	Selective Gold Plated	Tin plated	Packaging
22-30	0.90 - 1.50	76347-301LF	76347-401LF	15.000/reel
22-30	0.90 - 1.50	76347-302 LF•	76347-402LF•	15.000/reel
22-30	0.90 - 1.50	76347-303 LF	76347-403LF	500/reel
20-22	1.10 - 1.60	76347-311LF	76347-411LF	15.000/reel
20-22	1.10 - 1.60	76347-312 LF•	76347-412LF•	15.000/reel

Part numbers / Contacts loose Piece

Wire size	insulation O.D.	Selective Gold Plated	Tin plated	Packaging		
22-30	0.90 - 1.50	76357-301LF	76357-401LF	1000/box		
Notes: • = reeled for application machine with left-to-right feeding						



PRODUCT



Contacts to be used with housing = 65239-xxx / 65240-xxx

Wire strip length = $3,00 \pm 0,25 \text{ mm}$

Mating pin size = 0,62 mm square

Mating pin recommended length = 5,00 mm min.

- ► For use with Dubox[™] crimp-to-wire contacts
- Stackable end-to-end
- ▶ Passive latching, anti-reverse and anti-miss-match when used with Dubox[™] shrouded headers
- Contacts removable for easy repairability

TECHNICAL DATA

PHYSICAL

- Housing: Glass filled thermoplastic polyester
- Housing color blue
- ► Flammability rating: UL 94 V-0

ELECTRICAL PERFORMANCE

- Insulation resistance: 1x 10⁵ MΩ min.
- Dielectric withstanding voltage: 1000 V rms

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Bulk

PROCESSING INFORMATION

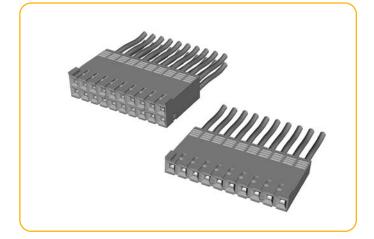
■ Compatible with wave soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Application specification: TA-317, TA-340

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- BergStik® unshrouded straight headers 8, 10
- BergStik® unshrouded right angle headers 14, 16
- Dubox[™] shrouded vert./ra. headers 30

INSERTION DEPTH

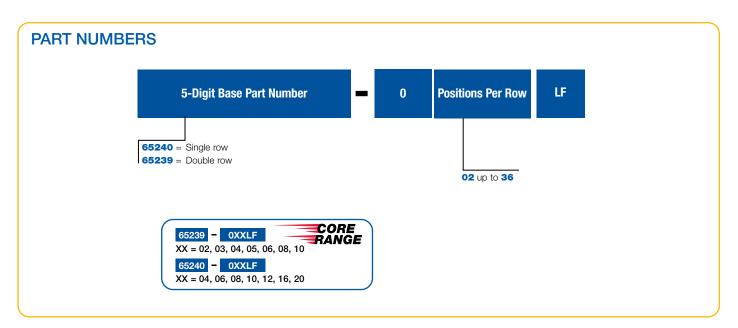
≥ 3.6 mm min. to 6.0 mm max.

TYPICAL APPLICATIONS Insertion Depth Insertion Depth Depth

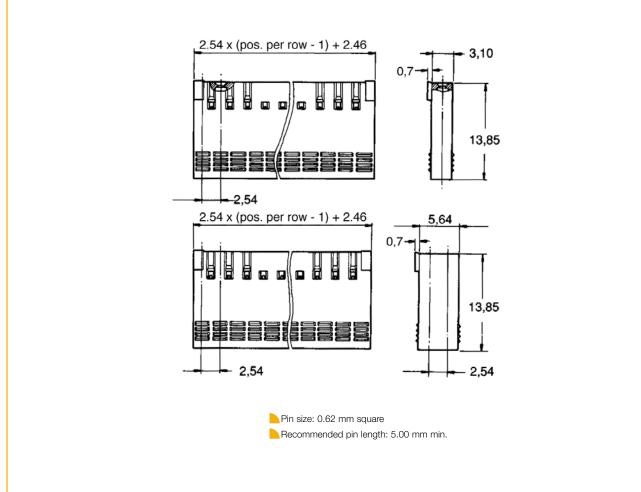




Dubox™ Crimp-to-Wire Housings



PRODUCT



- Housing uses our high reliability contact
- High temperature headers
- Passive latching system

TECHNICAL DATA

PHYSICAL

- ▶ Housing: Black thermoplastic
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin-lead over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- Insulation resistance: 1x 10⁵ MΩ min.
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

■ Contact retention to housing: 17.76 N min.

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

Bags

PROCESSING INFORMATION

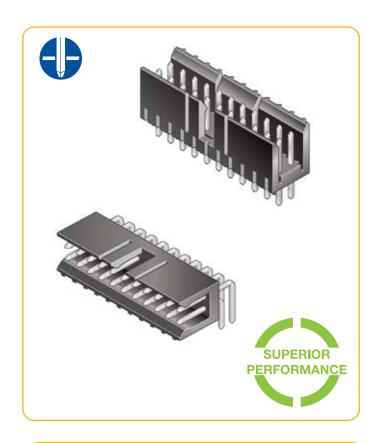
Compatible with wave soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ▶ Product specification: BUS-12-067, BUS-12-075
- ▲ Application specification: TA-531

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

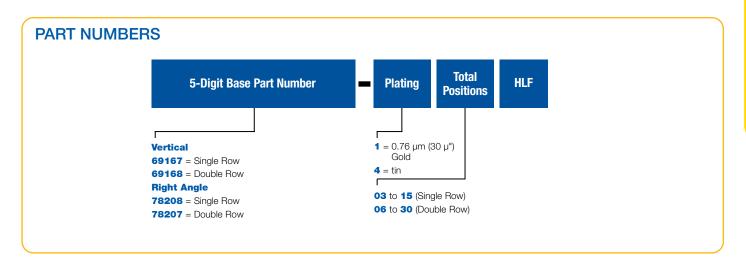
- PV™ Crimp-to-wire contacts 38
- Note: PV™ Crimp-to-wire housings 40

TYPICAL APPLICATIONS Insertion Depth Dept

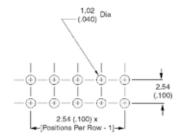




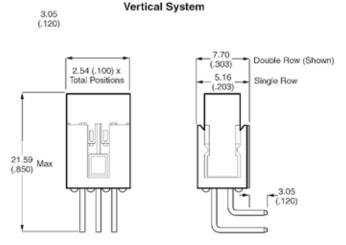
PV™ Shrouded Headers



PRODUCT 2.54 (.100) x Total Positions 16.38 (.645) Double Row (Shown) Single Row



Recommended PCB layouts



Right Angle System

Dimension in mm

- High reliability contacts for shock and vibration applications
- Three spring thickness options meet application specific insertion, withdrawal, and normal force requirements
- Leaf spring design provides constant retention force after repeated cycles

TECHNICAL DATA

PHYSICAL

- Contact: Brass body with beryllium-copper spring
- Pin: Brass
- Plating: Gold or tin over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous depending on wire size
- ▶ Insulation resistance: 5000 m Ω min.
- ► Contact resistance after environmental test: 15Ω m max. Contact
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

- Mating cycles (durability): 1000 Gold
- Insertion force per gold contact:

2.35 N (240 gf) - Standard spring 4.41 N (450 gf) - High spring 10.79 N (1100 gf) - Ultra high spring

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

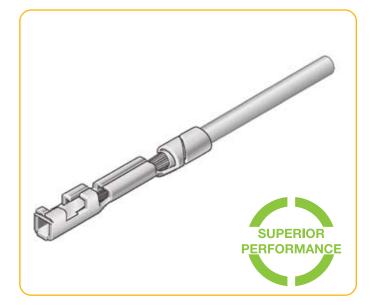
- 1Reels
- Boxes Loose piece

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-067 Contact
- Application specification: TA-75, TA-146 Contact, TA-295, TA-228 and TA-302

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

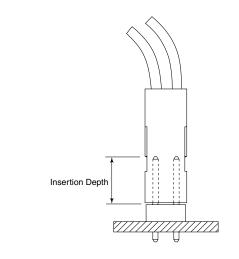
Continuous unshrouded headers 12

■ Unshrouded vertical headers 8, 10

■ Unshrouded right angle headers 14, 16

INSERTION DEPTH

- Discrete Wire: 3.5 mm min. to 5.3 mm max. [provides .381 mm wipe]
- Crimp-to-Wire Housing: 4.2 mm min. to 5.3 mm max. [provides . 381 mm (.015") wipe in housing]







LF

PV™ Crimp-to-Wire Contacts

PART NUMBERS

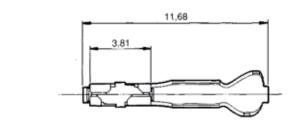
HOW TO SELECT
THE RIGHT CONTACT
Step 1 Select Application

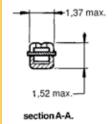
Step 2 Select Spring Force
Step 3 Select Wire Size

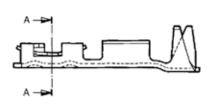
5-Digit Base Part Number 1 2 Application Spring Force Housing 40-72 Contacts Per Housing Standard 10-50 Contacts Per Housing High 2-20 Contacts Per Housing Ultra High Discrete Contact Ultra High

Wire Size (AWG)	Application Spring Force	Part Number
18, 20	Standard	48276-002LF
or two 22	High	48047-002LF
or two 24	Ultra High	47566-002LF
22, 24, 26	Standard	47457-002LF
or two 26	High	47439-002LF
or two 28	Ultra High	47565-002LF
28, 30, 32	Standard	48048-002LF
or two 30	High	47437-002LF
or two 32	Ultra High	47564-002LF

PRODUCT







Standard Mini-PV 1.75 0.00 - 0.89 0.508 ± 0.05 0.127 min. 1.32 max. Rear-belimouth Crimp height Refer to TA75, TA146

3-Digit

Dash Number



- Lowest profile housing in the industry
- Designed for use with our high reliability PV[™] Contact

TECHNICAL DATA

PHYSICAL

- Housing: Black thermoplastic
- Flammability rating: UL 94 V-0

ELECTRICAL PERFORMANCE

- Insulation resistance: 1x 10⁵ MΩ min.
- Dielectric withstanding voltage: 1000 V rms

MECHANICAL PERFORMANCE

Contact retention to housing: 17.76 N min.

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

Bags

PROCESSING INFORMATION

Compatible with wave soldering processes

REFERENCE INFORMATION

- **File no. E66906**
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Aroduct specification: BUS-12-067
- Application specification: TA-531

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

Continuous unshrouded headers 12

Unshrouded vertical headers 8, 10

■ Unshrouded right angle headers 14, 16

INSERTION DEPTH

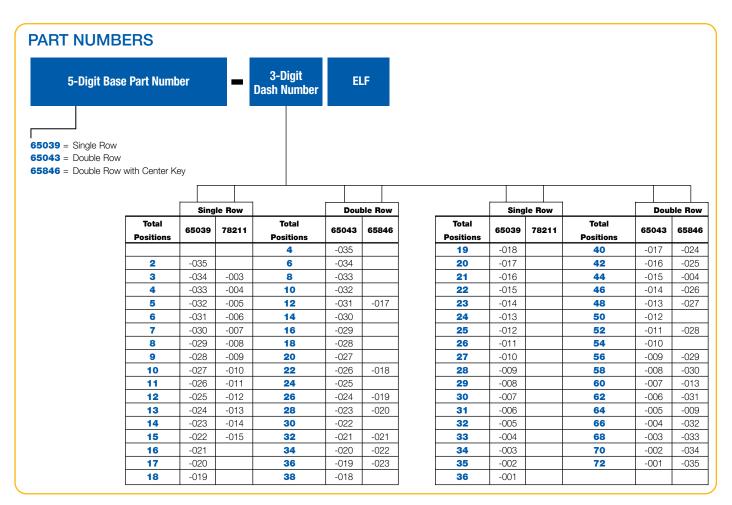
▲ 4.2 mm (.165") min. to 5.3 mm (.210") max. [provides .381 mm (.015") wipe in housing].

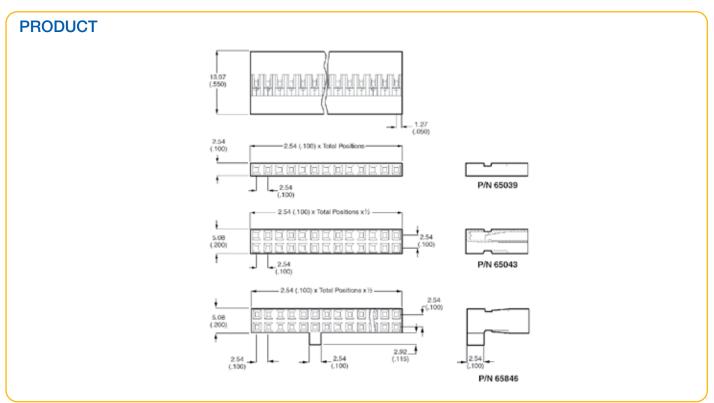
TYPICAL APPLICATIONS Insertion Depth Insertio





PV™ Crimp-to-Wire Housings





- Recessed pins assure proper alignment and eliminate damage during mating
- ▶ End windows for latching with IDC receptacle

TECHNICAL DATA

PHYSICAL

- Housing: Glass filled, thermoplastic polyester, blue
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- ► Plating: Gold/GXT over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Dielectric withstanding voltage: 500 V rms min.

MECHANICAL PERFORMANCE

Pin retention to housing: 20 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +105°C

PACKAGING

Tubes

PROCESSING INFORMATION

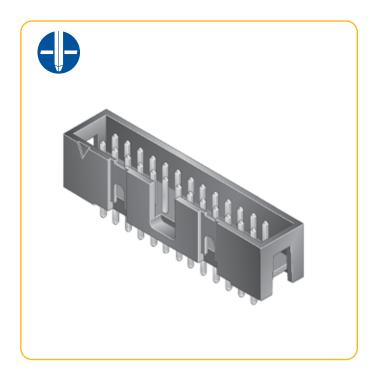
Compatible with wave soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-082

RoHs INFORMATION

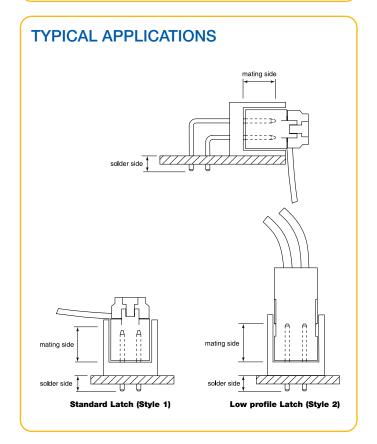
■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Quickie[™] IDC receptacles

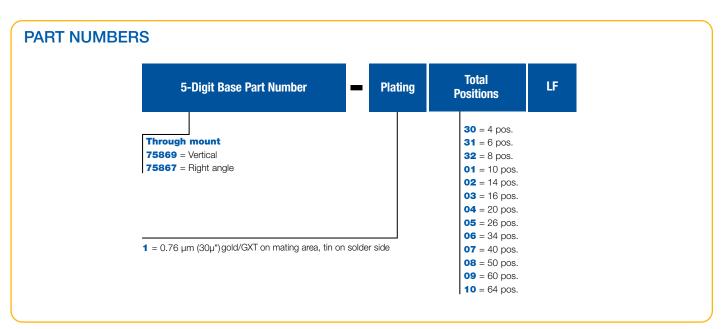
48

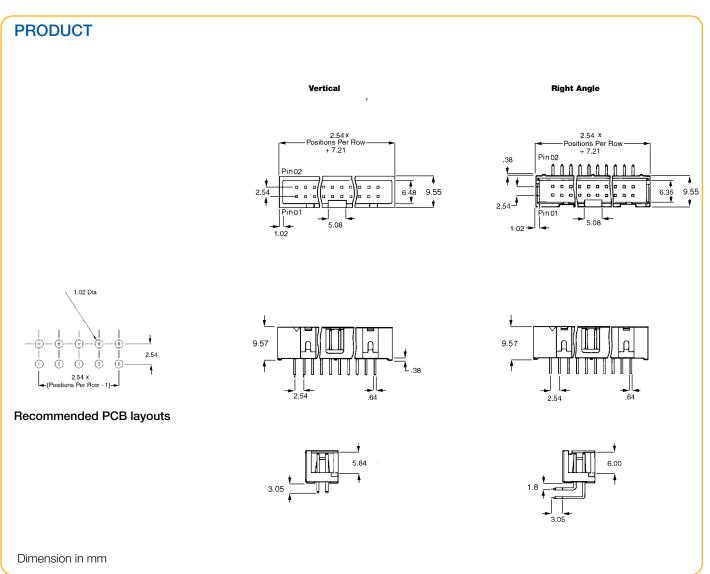






Quickie™ Shrouded Headers, Low Profile





- High temperature housing
- Compatible with IR reflow soldering processes
- ► Tape-and-Reel packaging for automatic pick-and-place

TECHNICAL DATA

PHYSICAL

Housing: Glass filled,
 high temperature thermoplastic polyester, black



- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- Plating: Gold/GXT over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 M\Omega$ min.
- Dielectric withstanding voltage: 500 V rms min.

MECHANICAL PERFORMANCE

Pin retention to housing: 20 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

- SMT: Tape-and-reel with pick-up cap
- PiP, right angle: Tube without pick-up cap
- PiP, straight: Tape and reel

▶ PROCESSING INFORMATION

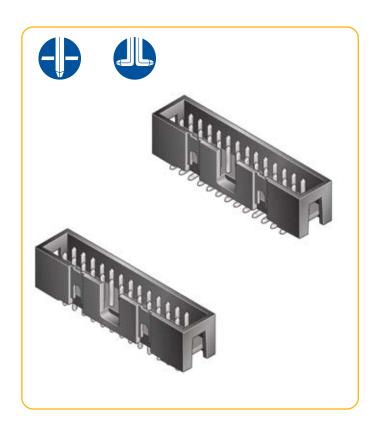
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-055

RoHs INFORMATION

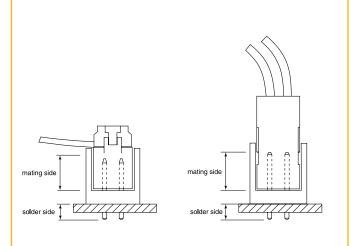
■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

Quickie™ IDC receptacles

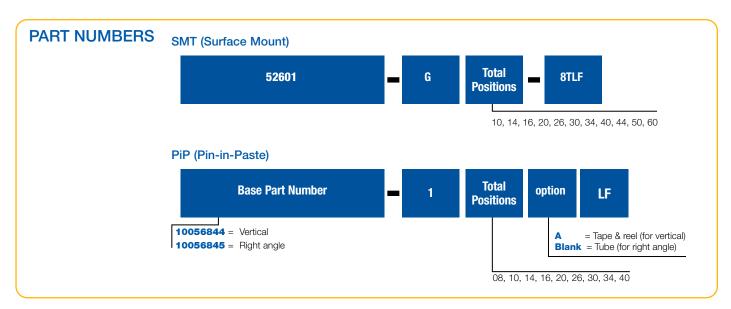
48

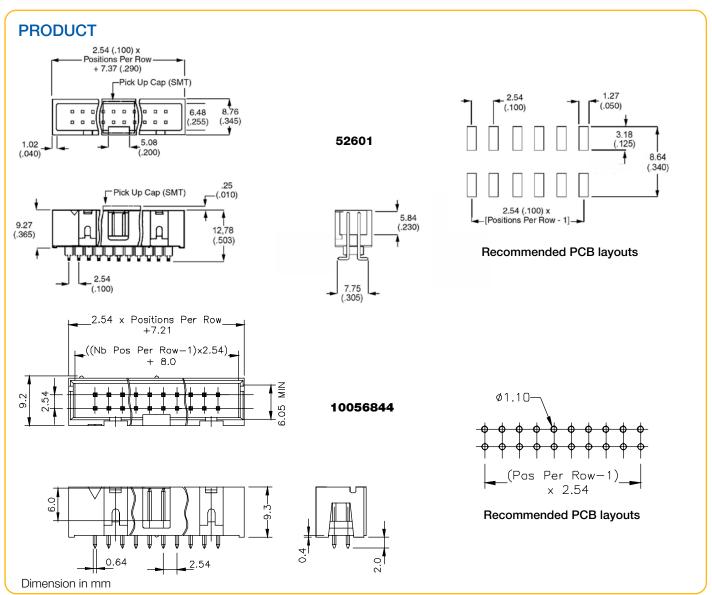






Quickie™ Shrouded Headers, Low Profile, SMT, Pin-in-Paste



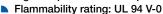


- Selective plating
- Recessed pins assure proper alignment and eliminate damage during mating

TECHNICAL DATA

PHYSICAL

Housing: Glass filled,
 high temperature thermoplastic polyester, grey





Plating: Gold/GXT over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE

Current rating: 3 A continuous

▶ Insulation resistance: $1x 10^5 MΩ$ min.

■ Dielectric withstanding voltage: 500 V rms min.

MECHANICAL PERFORMANCE

Pin retention to housing: 20 N min.

OPERATING TEMPERATURE RANGE

► -65°C to +105°C

PACKAGING

Tubes

PROCESSING INFORMATION

■ Compatible with wave soldering processes

REFERENCE INFORMATION

File no. E66906

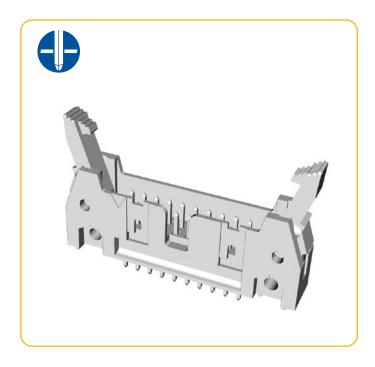
File no. LR46923

▶ Product drawing: By 5-digit base part number

► Product specification: BUS-12-082

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC

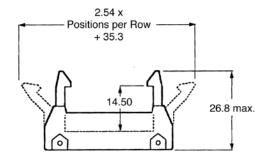


MATING DATA

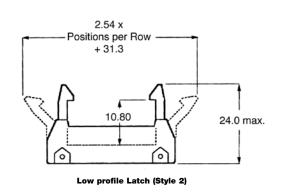
Quickie™ IDC receptacles

48

TYPICAL APPLICATIONS



Standard Latch (Style 1)

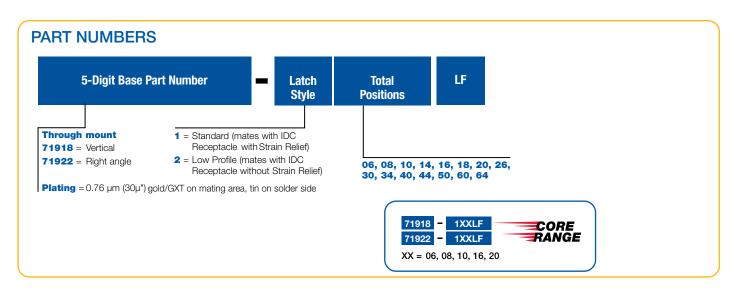


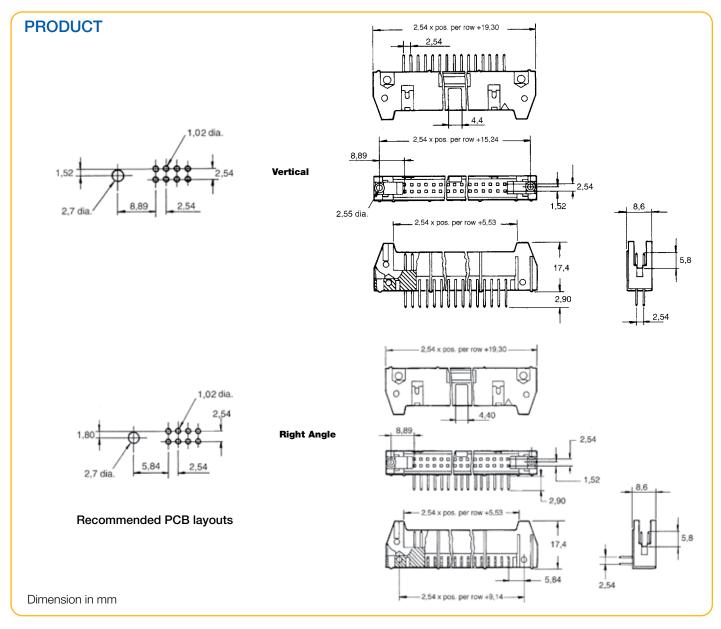
www.fci.com/basics





Quickie™ Shrouded Headers, Eject Latch





TECHNICAL DATA

PHYSICAL

- ► Housing: Grey thermoplastic Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- ► Plating: 0.76 μm (30μ") Gold over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 1 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- ▶ Contact resistance: 15 m Ω max.
- Dielectric withstanding voltage: 1000 V min. rms (sea level)

MECHANICAL PERFORMANCE

■ Mating cycles (durability): 100

OPERATING TEMPERATURE RANGE

► -65°C to +105°C

PACKAGING

Tubes

PROCESSING INFORMATION

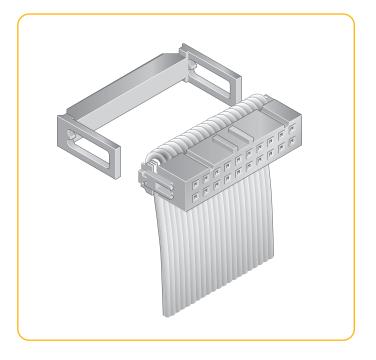
Compatible with wave soldering processes

REFERENCE INFORMATION

- File no. E66906
 File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-095

RoHs INFORMATION

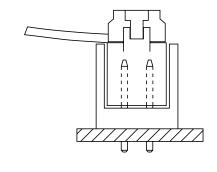
This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- BergStik® unshrouded vertical headers 8, 10, 12
- Quickie® shrouded low profile headers 42, 44
- Quickie® shrouded eject latch headers 46

TYPICAL APPLICATIONS

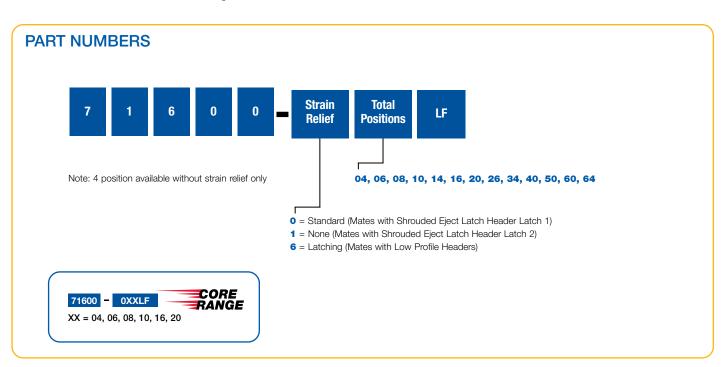


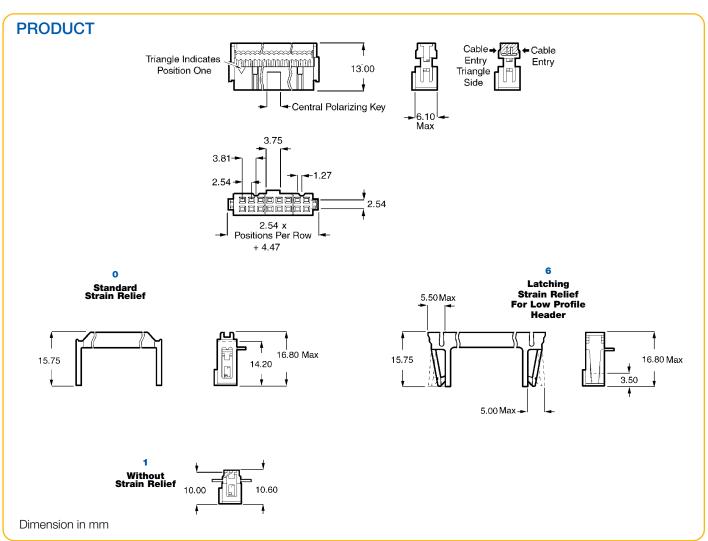
Low profile Latch (Style 2)





Quickie™ IDC Receptacle





- ldeal for daisy chain applications
- Single piece design provides one of the lowest applied costs in the industry

TECHNICAL DATA

PHYSICAL

- Housing: Blue thermoplastic
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Tin over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 1 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 15 mΩ max.
- Dielectric withstanding voltage: 1000 V min. rms (sea level)

OPERATING TEMPERATURE RANGE

► -65°C to +125°C

PACKAGING

Tubes

PROCESSING INFORMATION

 Compatible with wave and vapor phase soldering processes — Low temperature

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- ► Product specification: BUS-12-095

RoHs INFORMATION

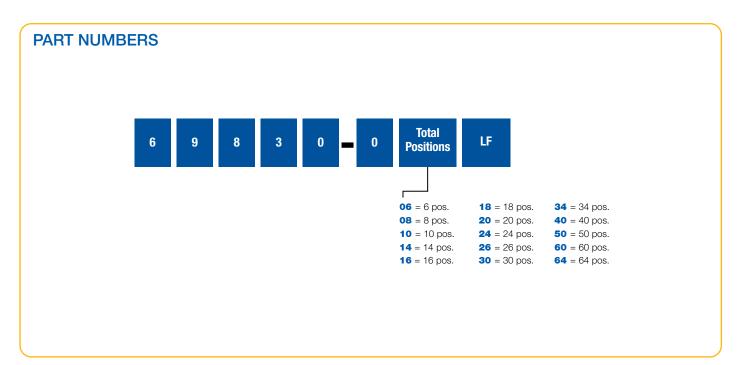
■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



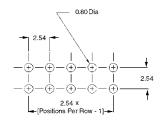




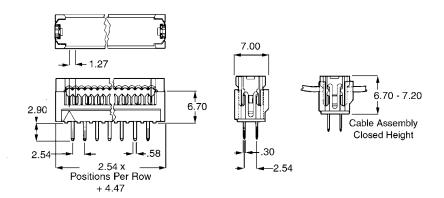
Quickie™ IDC PCB Connector



PRODUCT



Recommended PCB layouts



Dimension in mm

TECHNICAL DATA

PHYSICAL

- ► Housing: High-temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- ► Plating: Gold/GXT over 1.27 μm (50μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 100.

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

- ▶ Standard: TMT in tubes (04 to 06 pos. packed in box)
- SMT in Tape-and-reel
- Optional: SMT in Tubes

▶ PROCESSING INFORMATION

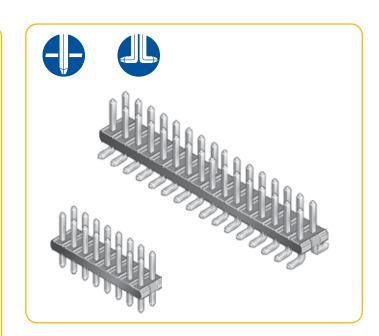
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: 57102 or 57202
- ▶ Product specification: DPS-12-011 and GS-12-163
- Tape and Reel packaging data: TA-884

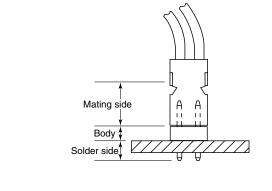
RoHs INFORMATION

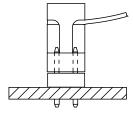
This product is RoHs compatible according to the European Union Directive 2002/95/IEC

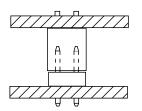


MATING DATA

Minitek™ ctw contacts and housings
 Minitek™ Vertical receptacles
 Minitek™ Shunts
 Minitek™ IDC receptacles



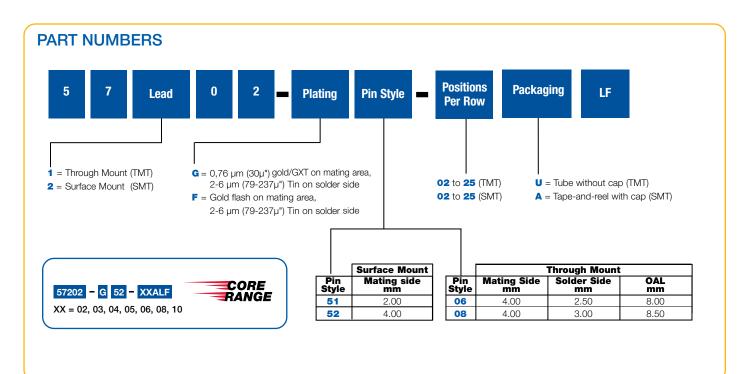


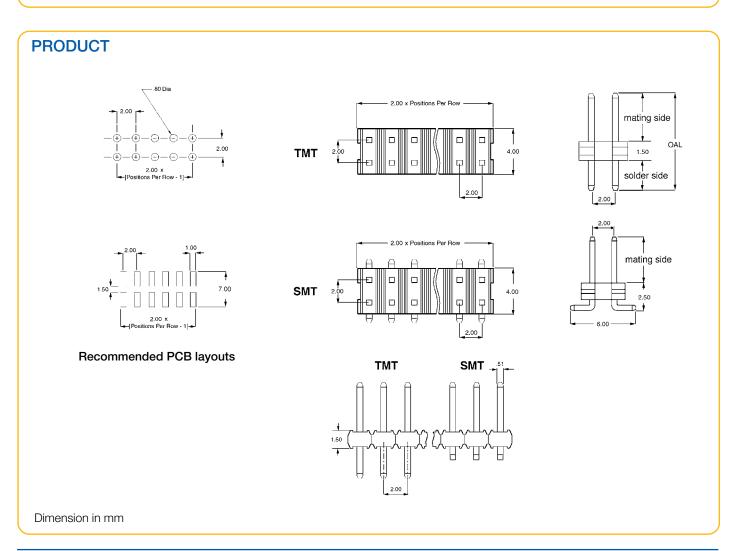






Minitek™ Unshrouded Vertical Headers





- High temperature plastic
- Selective plating

TECHNICAL DATA

PHYSICAL

- ► Housing: High-temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold/GXT over 1.27 μm (50μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 M\Omega$ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 100.

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

■ Tubes (04 to 06 pos. packed in box)

PROCESSING INFORMATION

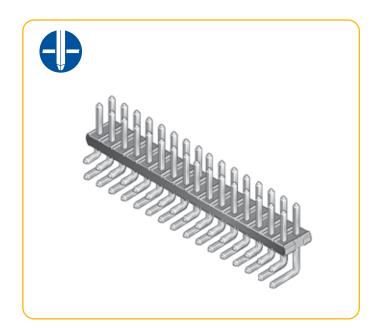
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- ▶ Product drawing: 98423
- ▶ Product specification: DPS-12-011 and GS-12-163

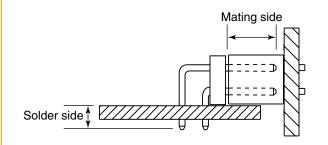
RoHs INFORMATION

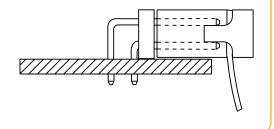
This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

Minitek™ ctw contacts and housings
 Minitek™ Vertical receptacles
 Minitek™ Shunts
 Minitek™ IDC receptacles
 76



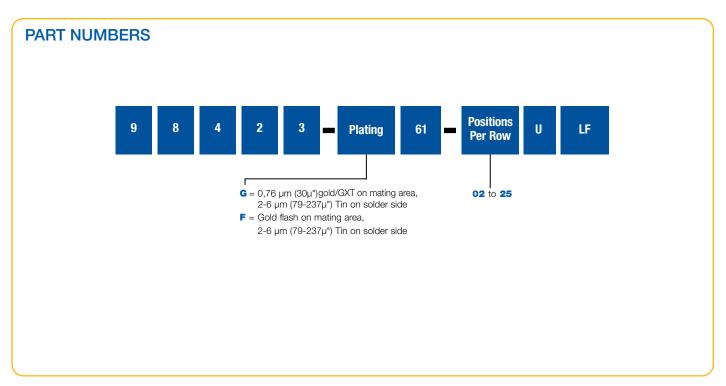


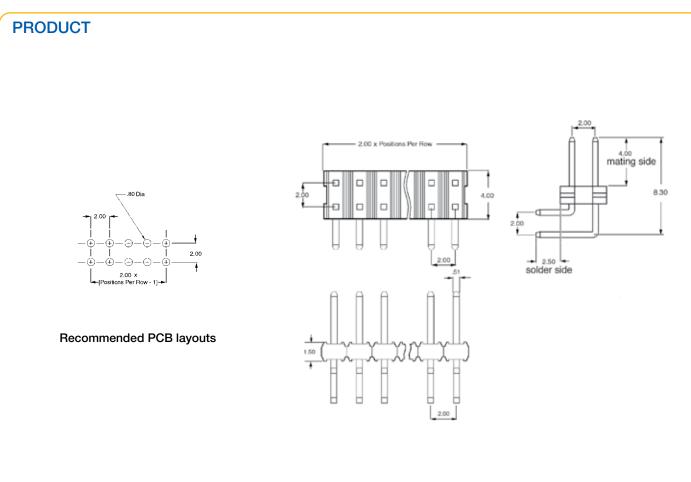


Dimension in mm



Minitek™ Unshrouded Right Angle Headers





TECHNICAL DATA

PHYSICAL

- ► Housing: High-temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- ▶ Plating: Gold/GXT over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE



- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 M\Omega$ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 100.

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

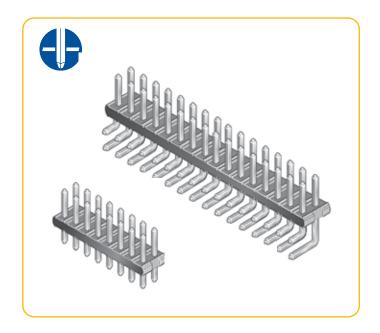
- Tubes (04 to 06 pos. packed in box)
- Tape on reel with pick up cap

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

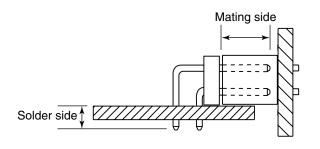
REFERENCE INFORMATION

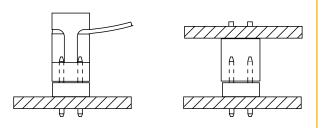
- File no. E66906
- File no. LR46923
- Product drawing: by 8-digit base part number
- ▶ Product specification: DPS-12-011 and GS-12-163
- Application specification: TA-895
- ► Reflow prpfile: TA-842



MATING DATA

Minitek™ ctw contacts and housings
 Minitek™ Vertical receptacles
 Minitek™ Shunts
 Minitek™ IDC receptacles

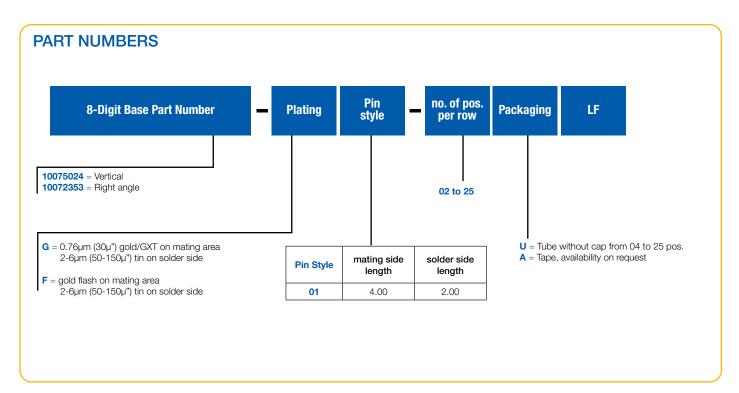


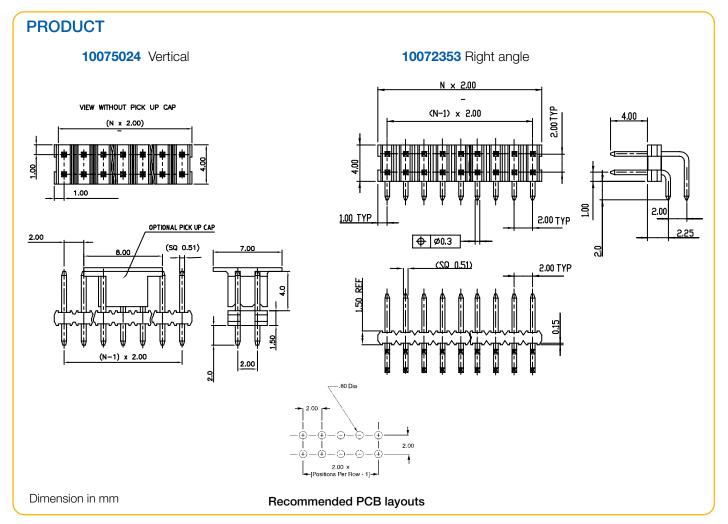






Minitek™ Unshrouded Headers, Pin-in-Paste





- ▶ Wide variety of stack heights in 0.13 mm increments
- Custom sizes to meet your specific design requirements

TECHNICAL DATA

PHYSICAL

- ► Housing: High-temperature, black thermoplastic
- Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- Plating: Gold over over 1.27 μm (50μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 100.

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

Standard: in bags

PROCESSING INFORMATION

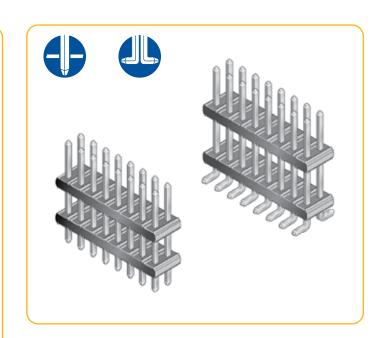
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: 59112, 59132, or 59202
- ► Product specification: DPS-12-011

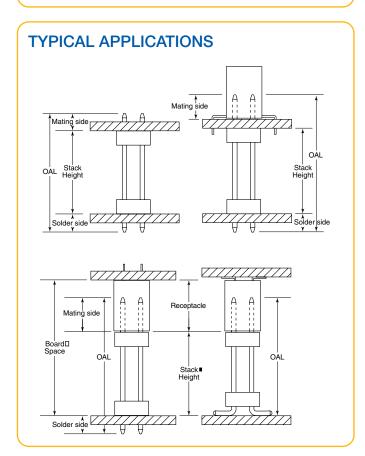
RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

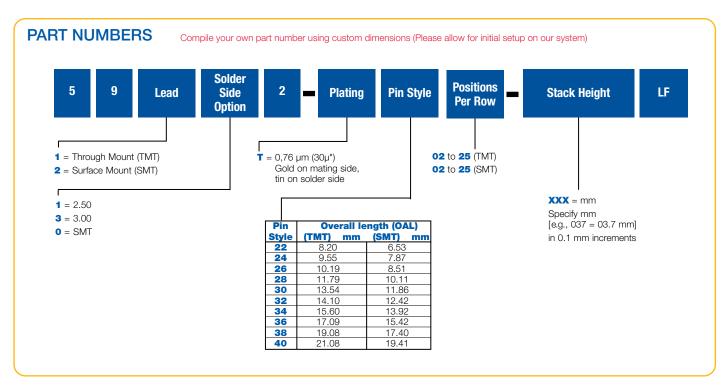
Minitek™ ctw contacts and housings 72
Minitek™ Vertical receptacles 60
Minitek™ Shunts 62
Minitek™ IDC receptacles 76

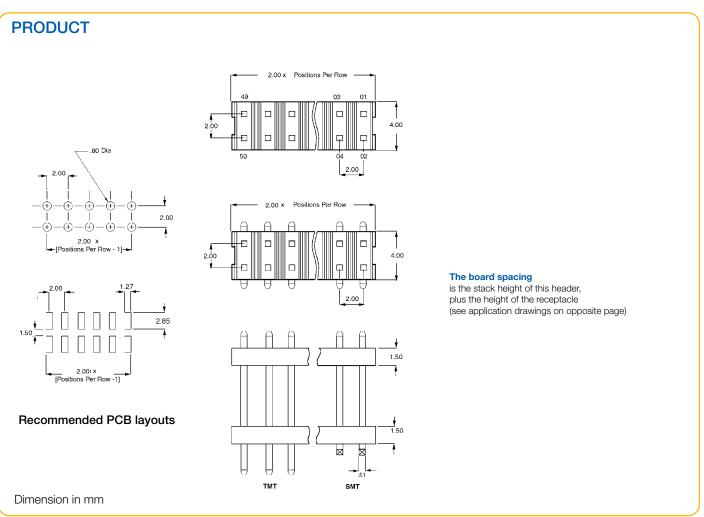






Minitek™ Unshrouded Stacking Headers





- ▶ Two housing heights: 2.30 mm, 4.50 mm
- Dual-beam contact design for highly reliable electrical performancets

TECHNICAL DATA

PHYSICAL

- ► Housing: High-temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
 Beryllium-copper 63453
- Plating: Gold over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 20 mΩ
 - 25 m Ω 63453
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 25

100 - 63453

► Contact retention to housing: 2.20 N (227 gf) min.

4.90 N (500 gf) min. - 63453

▶ Insertion force per contact: 1.80 N (184 gf) max.

1.95 N (200 gf) - 63453

■ Withdrawal force per contact: 0.20 N (20 gf) min.

OPERATING TEMPERATURE RANGE

▶ -55°C to +125°C

PACKAGING

■ Standard: TMT in Tubes

SMT in Tape-and-reel

■ Optional: Tubes (SMT)

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

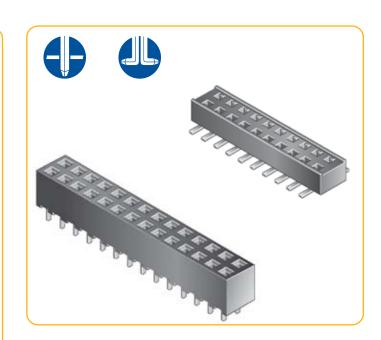
REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: by 5-digit base part number
- ▶ Product specification: GS-12-008

DPS-12-011 - for 63453

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



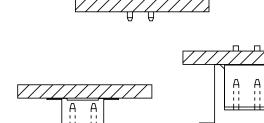
MATING DATA

Minitek™ Unshrouded headers
 Minitek™ Shrouded headers
 52, 54, 58
 64, 66

INSERTION DEPTH

- 4.50 mm height: 3.00 mm min. to 4.30 mm max. [provides .381 mm wipe]
- 2.30 mm height Top Entry: 1.30 mm min. to 2.20 mm max. [provides .381 mm wipe]
- 2.30 mm height Bottom Entry:1.40 mm min. to
 2.20 mm max. [provides .381 mm wipe]
 plus board thickness

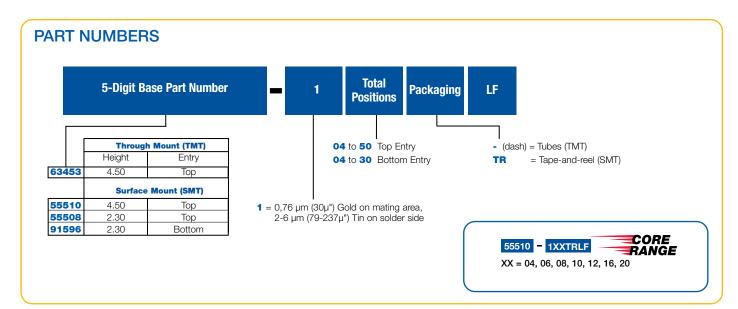
Receptacle A A Insertion

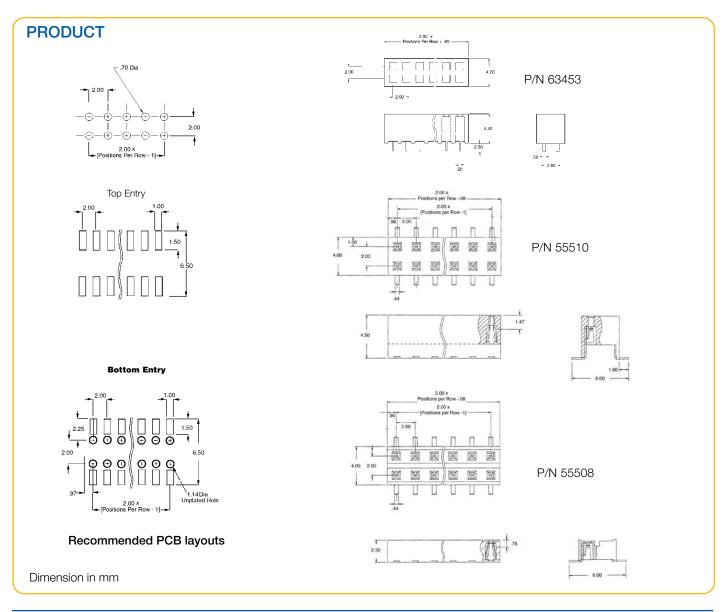






Minitek™ Vertical Receptacles





Early entry, dual-beam contacts provide long wiping action for reliable electrical contact

TECHNICAL DATA

PHYSICAL

- Housing: Black thermoplastic
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- ▶ Plating: Gold or tin-lead over 1.27 μm (50 μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 1 A continuous
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 25 mΩ
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

- Mating cycles (durability): 50
- Insertion force per contact: 6.41 N (650 gf) max.
- Withdrawal force per contact: 0.49 N (50 gf) min.

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

Bags

PROCESSING INFORMATION

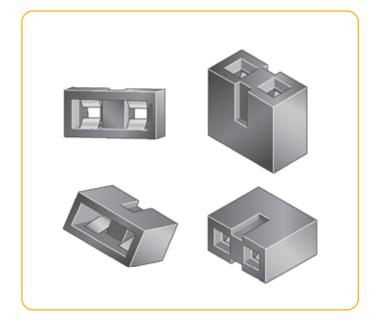
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: by 5-digit base part number
- ► Product specification: DPS-12-012

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



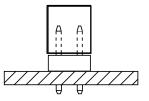
MATING DATA

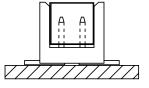
- Minitek™ Unshrouded headers
- 52, 54, 58
- Minitek[™] Shrouded headers

64, 66

INSERTION DEPTH

2.24 mm min. [provides .381 mm wipe]

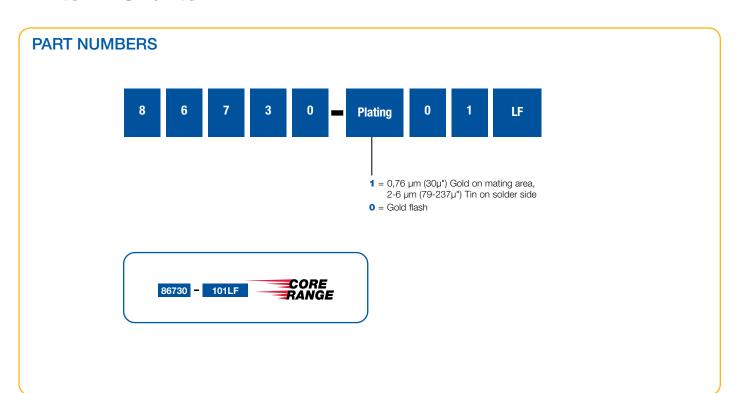




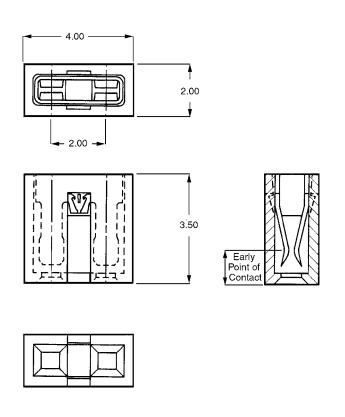




Minitek™ Shunts



PRODUCT



Dimension in mm

- ▲ 4-wall design prevents mis-mating
- Selective plating
- Co-planarity 0.1 (SMT)

TECHNICAL DATA

PHYSICAL

- Housing: High temperature, cream-colored thermoplastic
- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- ► Plating: Gold/GXT over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

■ Mating cycles (durability): 100

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

- Standard: TMT in Tubes (04 to 06 pos. packed in box) SMT in Tape-and-reel
- Optional: SMT in Tubes (04 and 06 in box)

PROCESSING INFORMATION

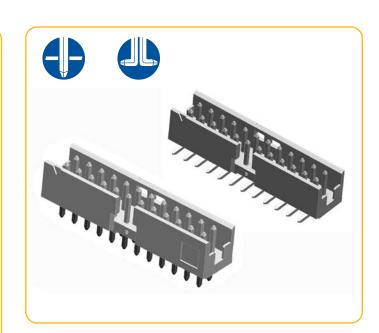
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: 98414 or 98424
- ▶ Product specification: DPS-12-011 and GS-12-163
- ► Tape and Reel packaging data TA-884

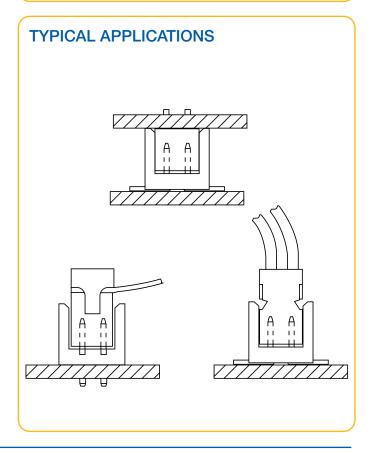
RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

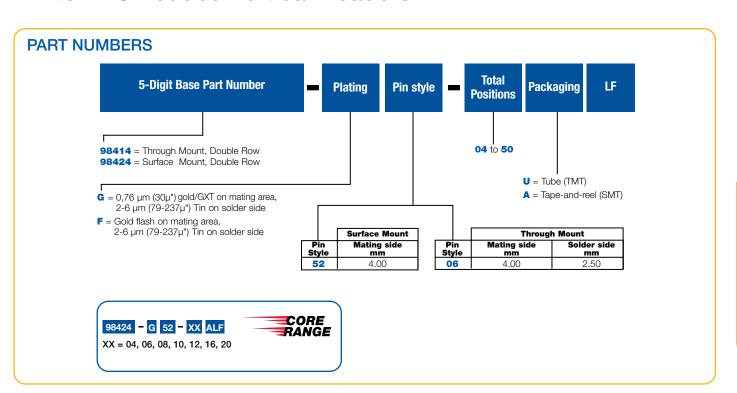
Minitek™ ctw contacts and housings	72
Minitek™ Vertical receptacles	60
Minitek™ Shunts	62
Minitek™ IDC receptacles	76
Minitek™ Active latch	74

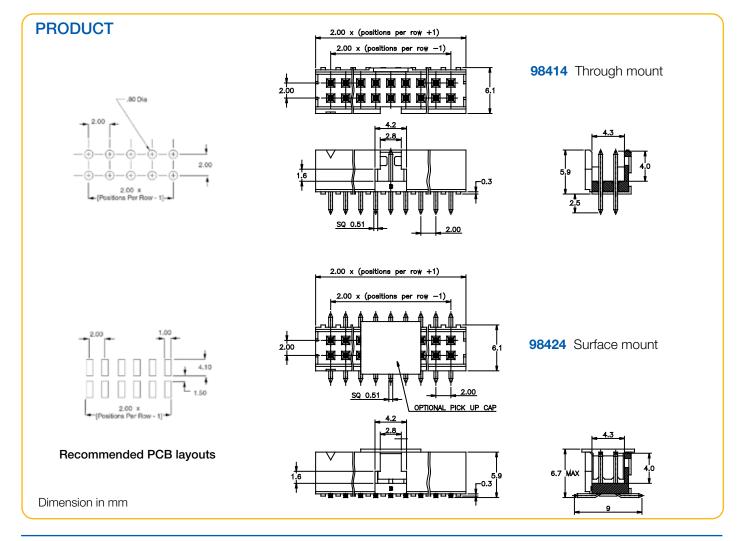






Minitek[™] Shrouded Vertical Headers





- ▲ 4-wall design prevents mis-mating
- Selective plating

TECHNICAL DATA

PHYSICAL

- ▶ Housing: High temperature, cream-colored thermoplastic
- Flammability rating: UL 94 V-0
- ▶ Pin: Phosphor-bronze
- Plating: Gold/GXT over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 100

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

Standard: Tubes (04 pos. packed in box)

PROCESSING INFORMATION

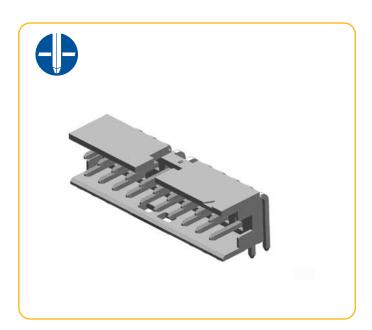
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- ► Product drawing: 98464
- ▶ Product specification: DPS-12-011 and GS-12-163

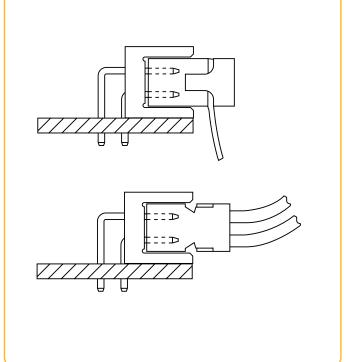
RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Minitek [™] ctw contacts and housings	72
Minitek™ Vertical receptacles	60
Minitek™ Shunts	62
Minitek™ IDC receptacles	76
Minitek™ Active latch	74

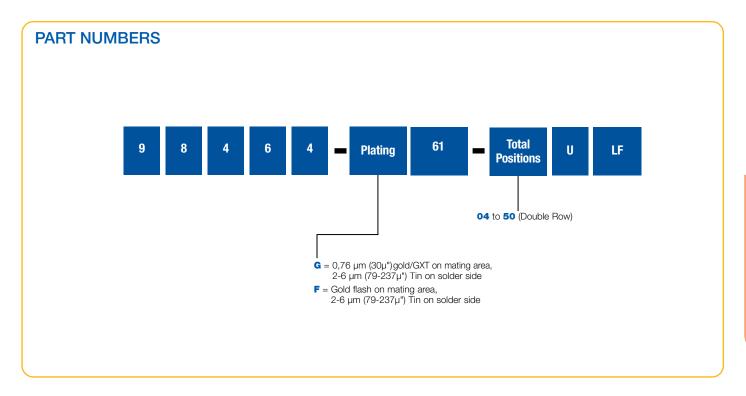


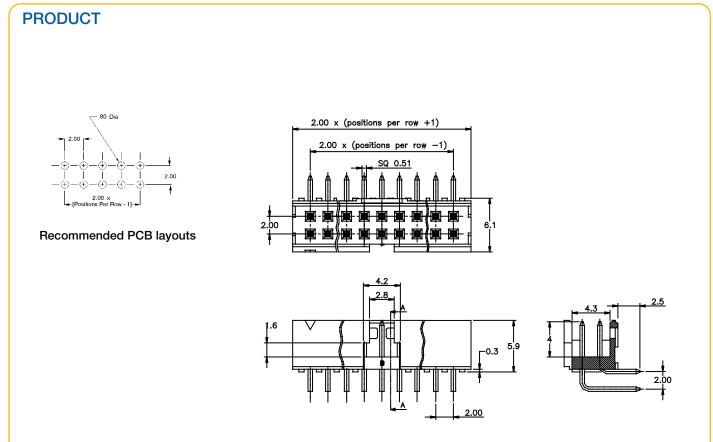


Dimension in mm



Minitek™ Shrouded Right Angle Headers





www.fci.com/basics

TECHNICAL DATA

PHYSICAL

- ► Housing: High-temperature, black thermoplastic
- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- ► Plating: Gold/GXT over 1.27 μm (50μ") nickel

■ ELECTRICAL PERFORMANCE



- Current rating: 3 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Mating cycles (durability): 100.

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

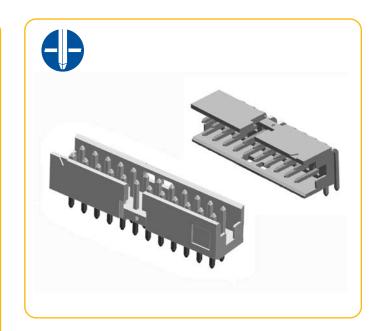
- ► Tubes (04 pos. packed in box)
- Tape on reel with pick up cap

PROCESSING INFORMATION

Compatible with wave, vapor-phase, and IR reflow soldering processes

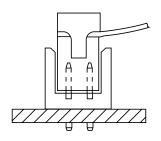
REFERENCE INFORMATION

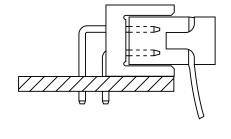
- File no. E66906
- File no. LR46923
- ▶ Product drawing: by 8-digit base part number
- ► Product specification: DPS-12-011 and GS-12-163
- Application specification: TA-895
- Reflow prpfile: TA-842



MATING DATA

Minitek™ ctw contacts and housings	72
Minitek™ Vertical receptacles	60
Minitek™ Shunts	62
Minitek™ IDC receptacles	76
Minitek™ Active latch	74

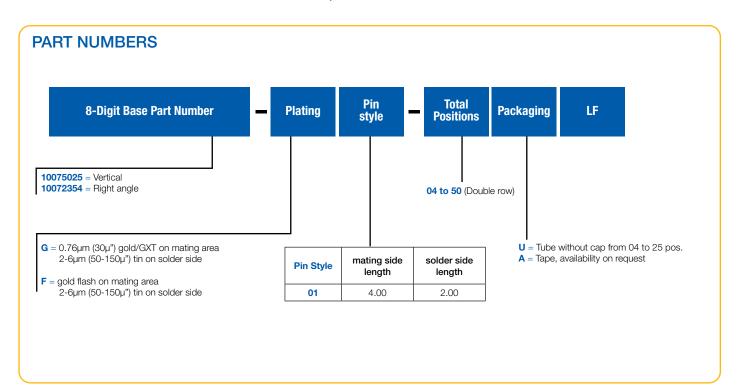


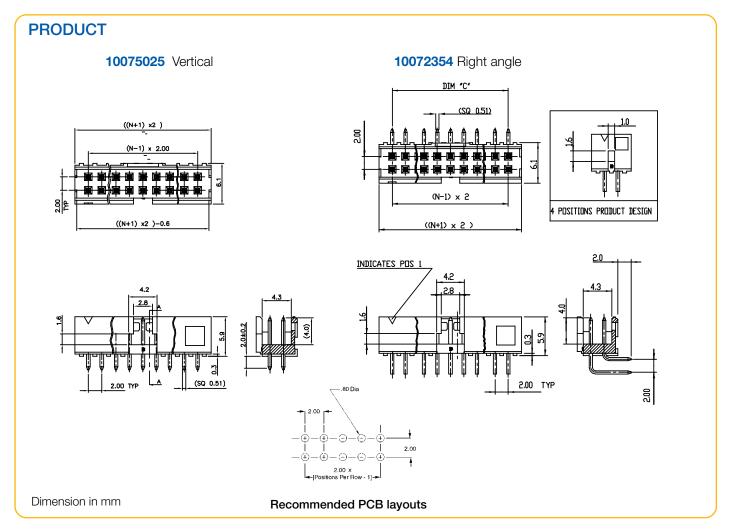






Minitek™ Shrouded Headers, Pin-in-Paste





Shrouded Eject Latch Headers

FEATURES

- Secure latching of cable connector
- Easy ejection when required
- ▶ Works with IDC connectors with or without strain relief
- Low profile

TECHNICAL DATA

PHYSICAL

- ► Housing: Body, cream-colored LCP, Latch black PA
- ► Flammability rating: UL 94 V-0
- ► Pin: Phosphor-bronze
- Plating: Gold/GXT over 1.27 μm (50 μ") nickel

■ ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 25 mΩ max.
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

Latching retention force: 30 N min.

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

Standard: Tubes

PROCESSING INFORMATION

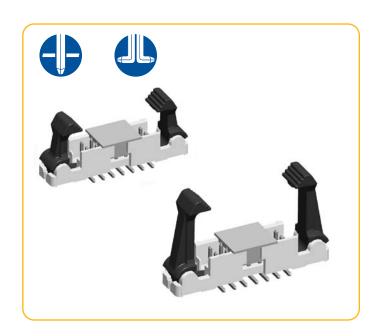
Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: 8-digit part number
- ► Product specification: GS-12-469

RoHs INFORMATION

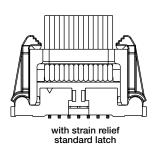
■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC

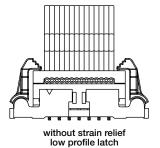


MATING DATA

Minitek™ IDC receptacles

76

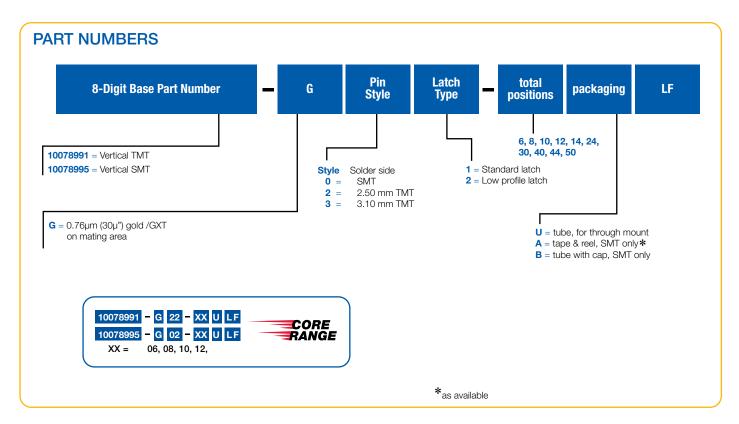


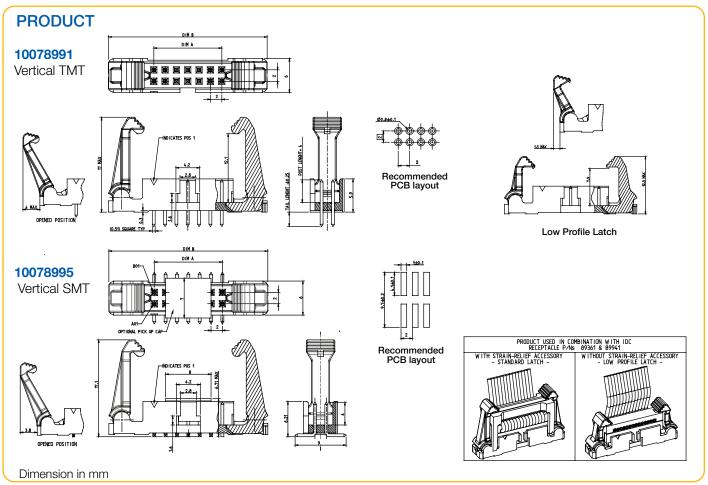






Minitek™ Shrouded Eject Latch Headers





Housings and Contacts

FEATURES

- Dual-beam contact design for highly reliable electrical performance
- Latching key assures proper alignment and friction retention

TECHNICAL DATA

PHYSICAL

- ▶ Housing: Black thermoplastic
- ► Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 20 mΩ
- Dielectric withstanding voltage: 650 V
- Voltage rating: 200 V.

MECHANICAL PERFORMANCE

- Mating cycles (durability): 100
- ► Contact retention to housing: 7.83 N (800 gf) min.
- Mating force per contact: 1.77 N (180 gf) max.
- ► Unmating force per contact: 0.20 N (20gf) min.

OPERATING TEMPERATURE RANGE

► -40°C to +125°C

PACKAGING

- Reels Contacts
- Bags Housings

REFERENCE INFORMATION

File no. E66906
File no. LR46923

► Product drawing: 77138 or 77139 – Contact

69307, 90311- Housing

▶ Product specification: 110-036

Application specification: 100-006, TA-959

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

Minitek™ Unshrouded headers

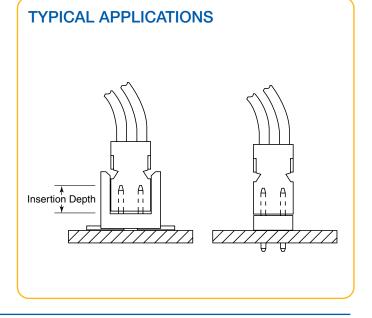
52, 54, 58

Minitek™ Shrouded headers

64, 66

INSERTION DEPTH

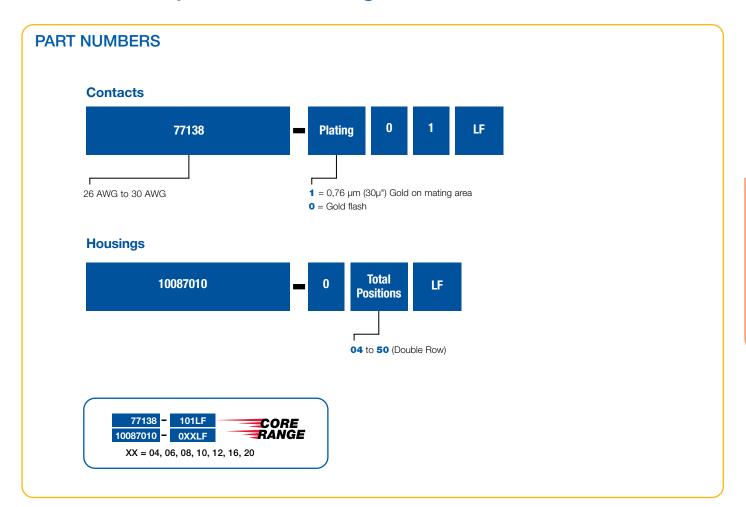
- 2.40 mm min. to 3.30 mm max. [provides .381 mm wipe]
- 3.63 mm min. to 4.00 mm max. [provides .381 mm wipe in housing]

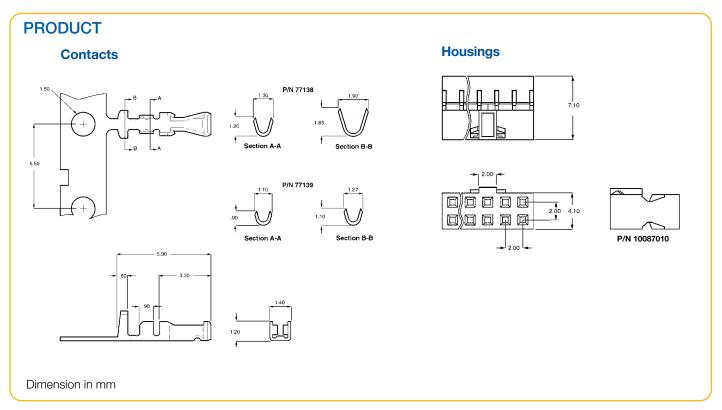






Minitek™ Crimp-to-wire Housings and Contacts





Housings, Active latch

FEATURES

- Latching retention 15/25 N (depending on size) due to latch alone
- Latches with audible click
- Mates with standard Minitek headers
- Latch can be released and parts unmated

TECHNICAL DATA

PHYSICAL

- Housing: Polyamide, black
- ► Flammability rating: UL 94 V-0

ELECTRICAL PERFORMANCE

- Insulation resistance: 1x 10⁵ MΩ min.
- Dielectric withstanding voltage: 500 V

MECHANICAL PERFORMANCE

- Latching retention force: 15 N min. (for 2x3 and 2x4 pos)
- Latching retention force: 25 N min. (for 2x5 and 2x25 pos)

OPERATING TEMPERATURE RANGE

► -55°C to +125°C

PACKAGING

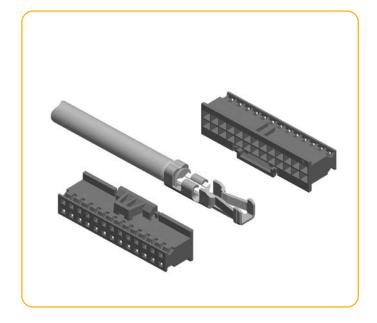
Standard: Plastic bags

REFERENCE INFORMATION

- File no. E66906
- File no. LR46923
- Product drawing: 8-digit part number
- ► Product specification: GS-12-415

RoHs INFORMATION

This product is RoHs compatible according to the European Union Directive 2002/95/IEC

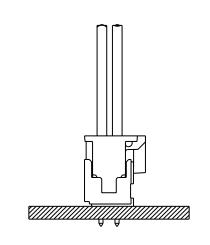


MATING DATA

- Minitek[™] Shrouded headers
- Minitek™ CTW contacts

64, 66, 68 72, 74

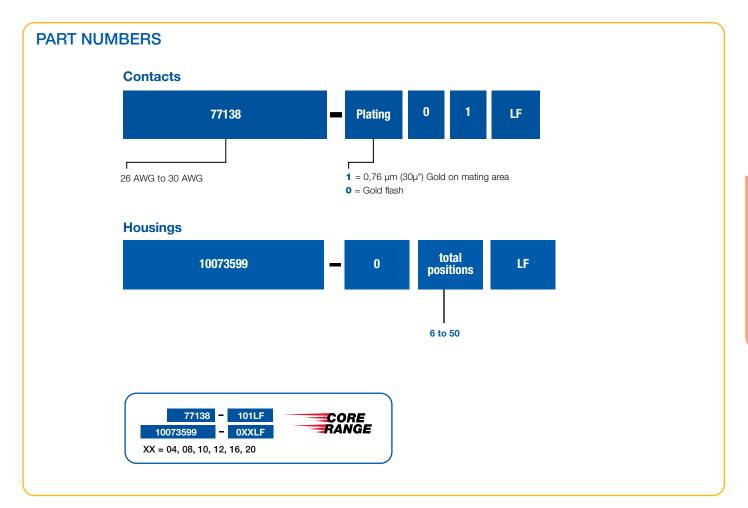
TYPICAL APPLICATIONS

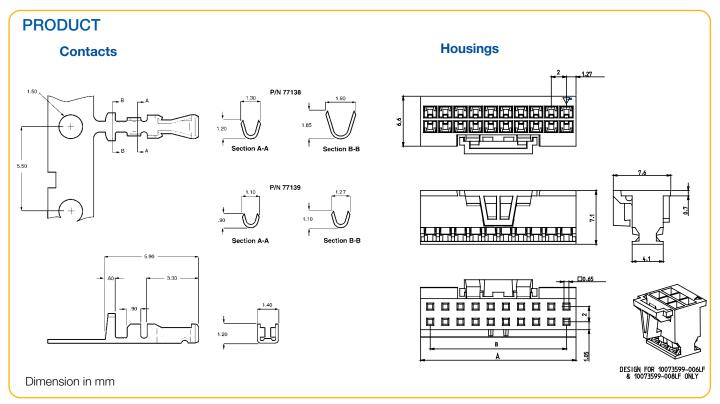






Minitek™ Crimp-to-wire Housings, Active latch





FEATURES

- Early entry, single-beam contacts provide long wiping action for reliable electrical contact
- Center key polarization and friction latch options

TECHNICAL DATA

PHYSICAL

- ► Housing: Black thermoplastic
- Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- Current rating: 1 A continuous
- ▶ Insulation resistance: $1x 10^5 MΩ$ min.
- Contact resistance: 30 mΩ
- Dielectric withstanding voltage: 650 V

MECHANICAL PERFORMANCE

► Mating cycles (durability): 100

OPERATING TEMPERATURE RANGE

► -40°C to +105°C

PACKAGING

Tubes

REFERENCE INFORMATION

File no. E66906

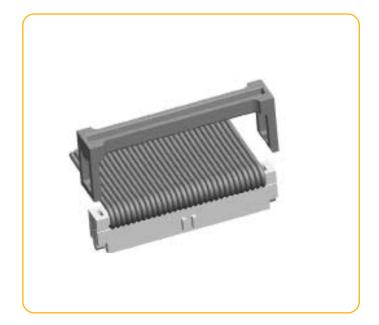
File no. LR46923

Product drawing: 89947 or 89361

► Product specification: BUS-12-115

RoHs INFORMATION

■ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

Minitek™ Unshrouded headers

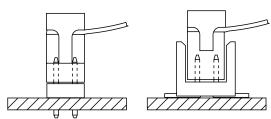
52, 54, 58 64, 66

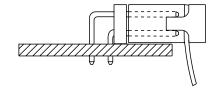
Minitek™ Shrouded headers

INSERTION DEPTH

2.55 mm min. to 4.57 mm max. [provides .381 mm wipe]

TYPICAL APPLICATIONS

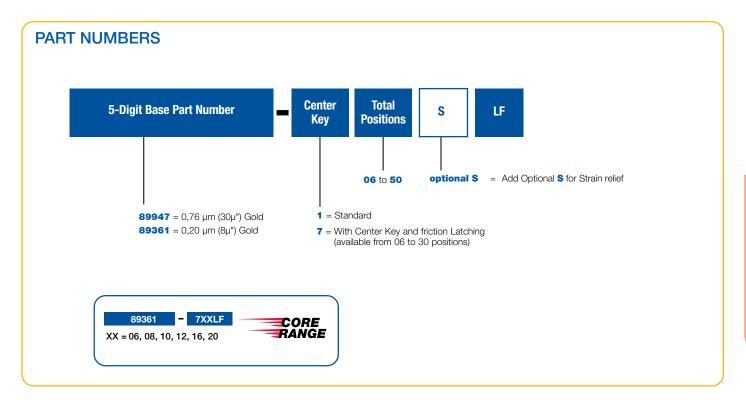




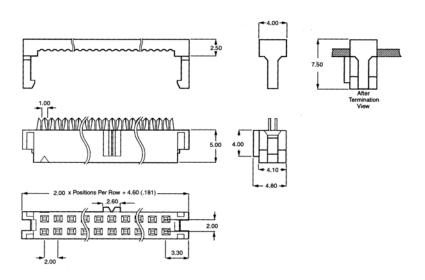




Minitek™ IDC Receptacle







Dimension in mm

MORE OPTIONS

If you need someting more than the standard parts in this catalog, Basics+ has many more options to help you in your design process. Here are just some examples.

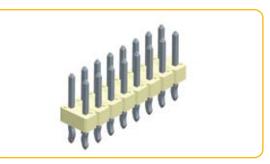
■ Locating pins on SMT headers



▶ Polarized (missing) positions



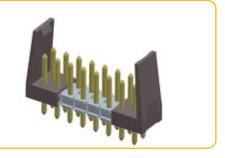
Kinked legs



Press-fit pins



Add-on latches for headers







Wide body headers Crimp-to-wire pin **Printed housings** Additional plating options Pin-in-paste headers

Visit: www.fci.com/basicsdesign to specify your design need

Application Equipment



DUBOX™ CRIMP-TO-WIRE CONTACTS

Contact Description	Wire size	Hand Tool	Mini-Applicator (right to left feeding)	Mini-Applicator (left to right feeding)	Repair Tool
Dubox	AWG 20-22	RCY21235	RCY20027	RCY20017	HT 272
Dubox	AWG 22-24	RCY21234	RCY20008	RCY20029	HT 272
Dubox	AWG 26-30	RCY21234	RCY20008	RCY20029	HT 272
Small insulation Dubox	AWG 28-32	-	RCY20028		HT 272

PV™ CRIMP-TO-WIRE CONTACTS

Contact Description	Wire size	Hand Tool	Mini-Applicator	Repair Tool
Standard Mini-PV	AWG 18-20	HT-0073	133867-104	HT-0080
Standard Mini-PV	AWG 22-26	HT-0095	133867-105	HT-0080
Standard Mini-PV	AWG 28-32	HT-0095	133867-106	HT-0080
Standard Mini-PV	AWG 34-36	HT-0112	133867-108	HT-0080
Small Insulation PV	AWG 22-26	HT-207	-	HT-0080
Small Insulation PV	AWG 28-32	HT-217	-	HT-0080

MINITEK™ CRIMP-TO-WIRE CONTACTS

Contact Description	Wire size	Hand Tool	Mini-Applicator	Repair Tool
Minitek	AWG 26-30	RCY21151	155250-101	HT-0080
Minitek	AWG 32-36	RCY21152	155250-102	HT-0080

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Application Equipment



BergStik® AND Bergstrip®

- Manual cutting tool: HT 320
- Automatic cutting machine for Bergstrip: BSS-300

Quickie® IDC

- Manual flat cable cutter: HT 209
- Quickie assembly hand tool: HT 210
- Many other variations of manual, semi- automatic and automatic tools available upon request.

Minitek® IDC

Manual flat cable cutter: HT 209

Hand Press: QP-104

Where to get your tooling

These toolings and more detailed advice, pricing, availability etc. are available through your distributor or from the following suppliers:

Americas

Phone: 1-800-843-6911

E-mail: doug.sheaffer@fciconnect.com

Europe

Föhrenbach Application Tooling N.V.

Phone: +32 3 216 19 98

Email: application.tooling@foehrenbach.be

Asia

Phone: +65 549 6666

E-mail: fcising_sales@fciconnect.com

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Mouser Electronics

Authorized Distributor

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