



 Product Catalog

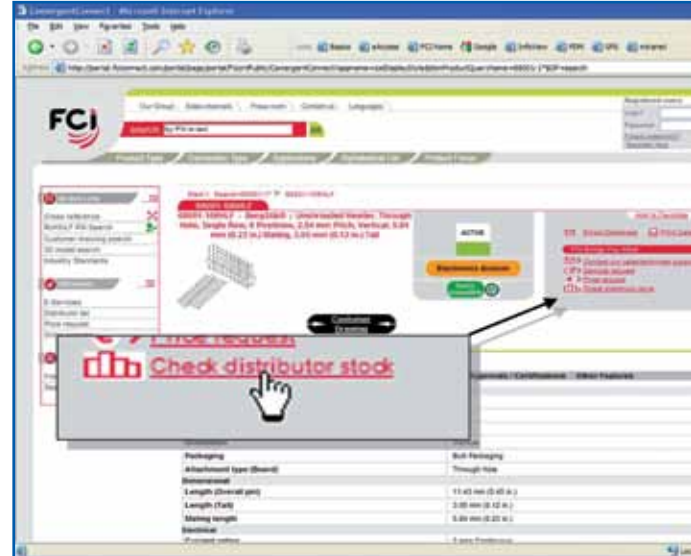


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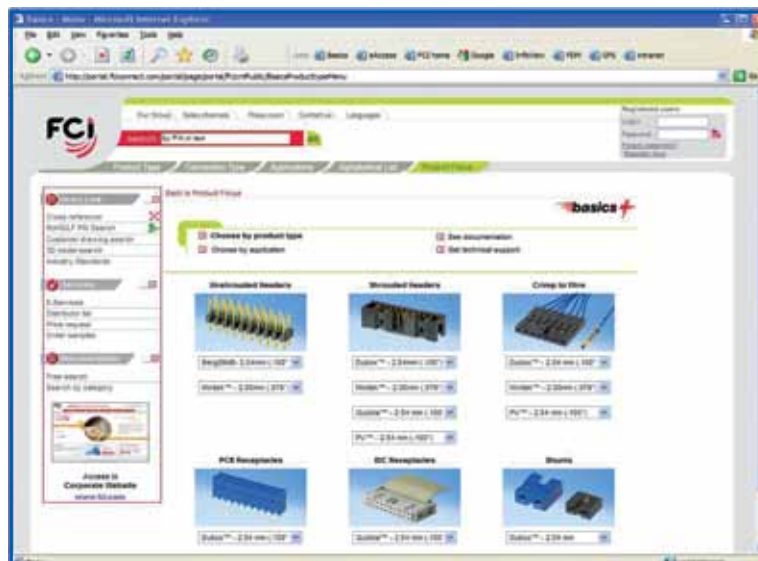


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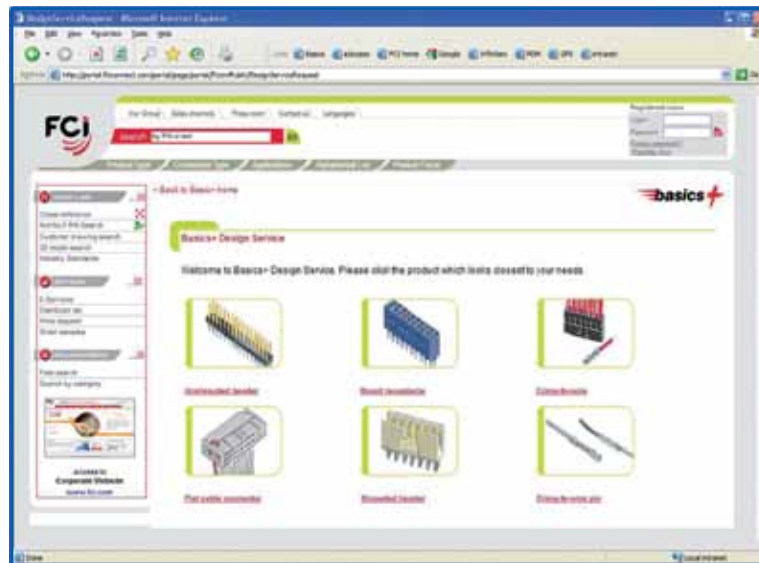
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UNSHROUDED HEADERS



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SHROUDED HEADERS



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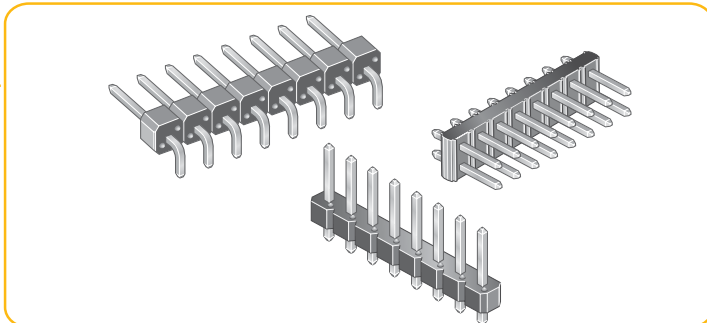
MORE OPTIONS	76
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Standard parts available for immediate shipment from participating distributors

Pin-in-Paste

Our new PiP range has been specifically designed to meet the requirements of this process, complete with paste stencil design
Pages 54, 66



Minitek Active Latch

A latching crimp-to-wire system for demanding environments
Pages 64, 72



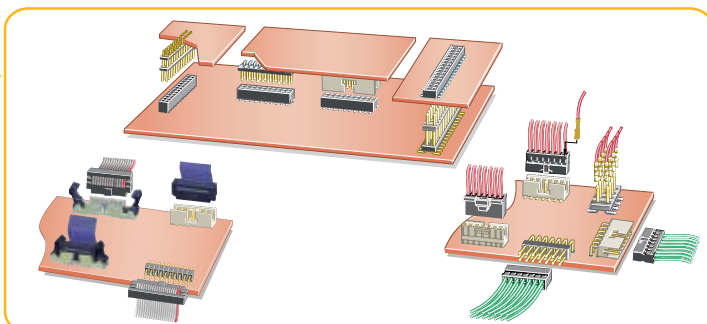
Minitek Eject Latch Header

This ribbon cable connector mates securely, but can be unmated with no difficulty.
Pages 68, 74



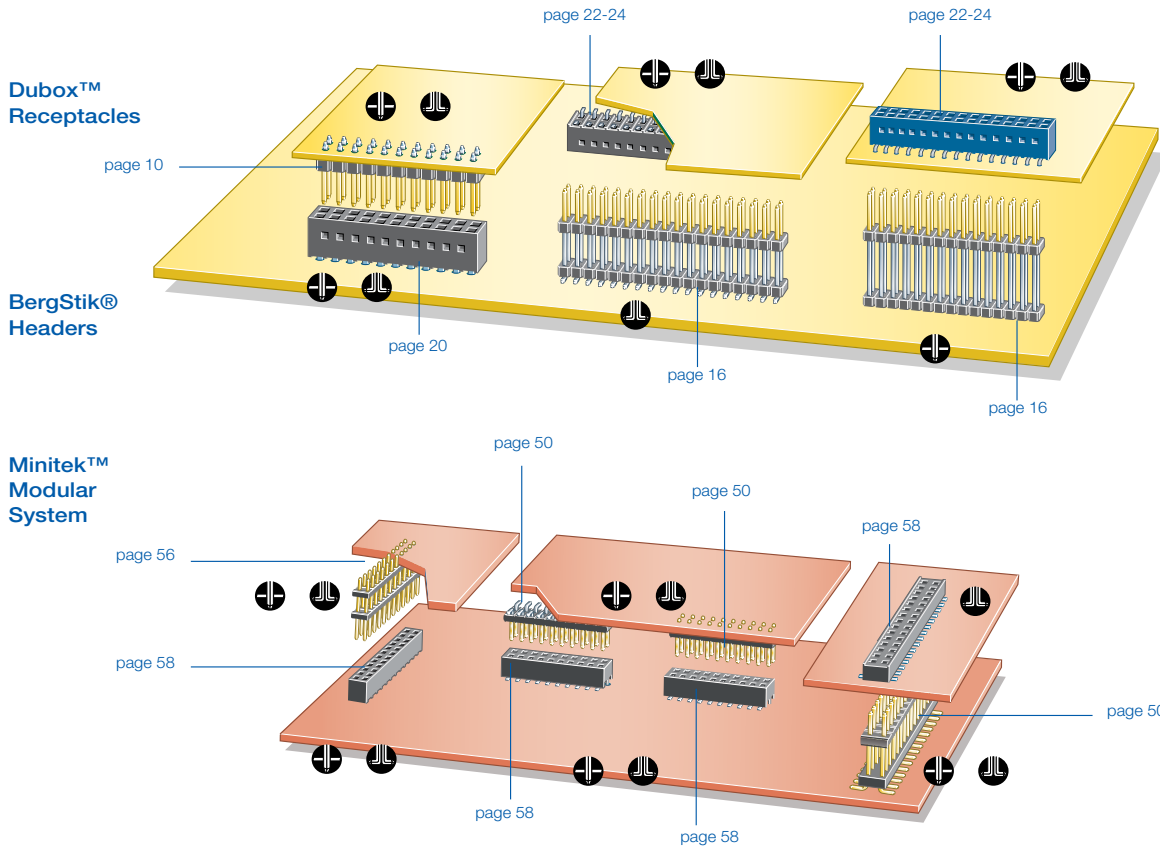
The Minitek 2mm Modular System

Now the most complete and versatile system available: intermateable, high temperature compatible, low coplanarity and space saving
Pages 50 – 74

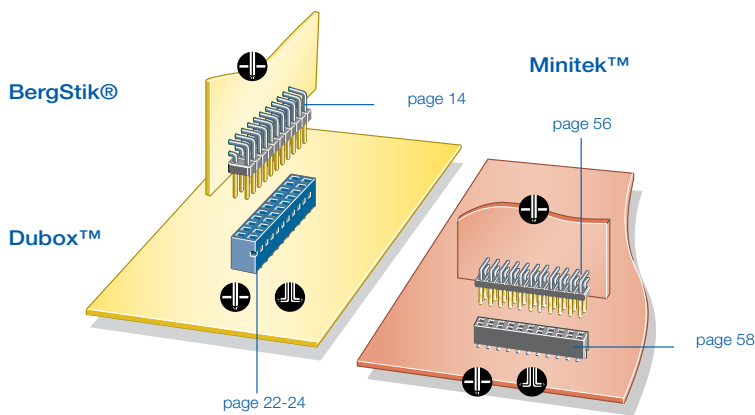


BOARD-TO-BOARD SOLUTIONS

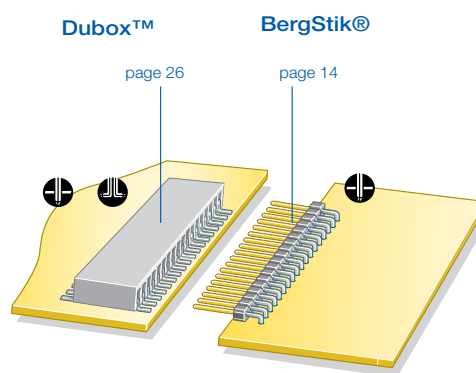
PARALLEL



PERPENDICULAR



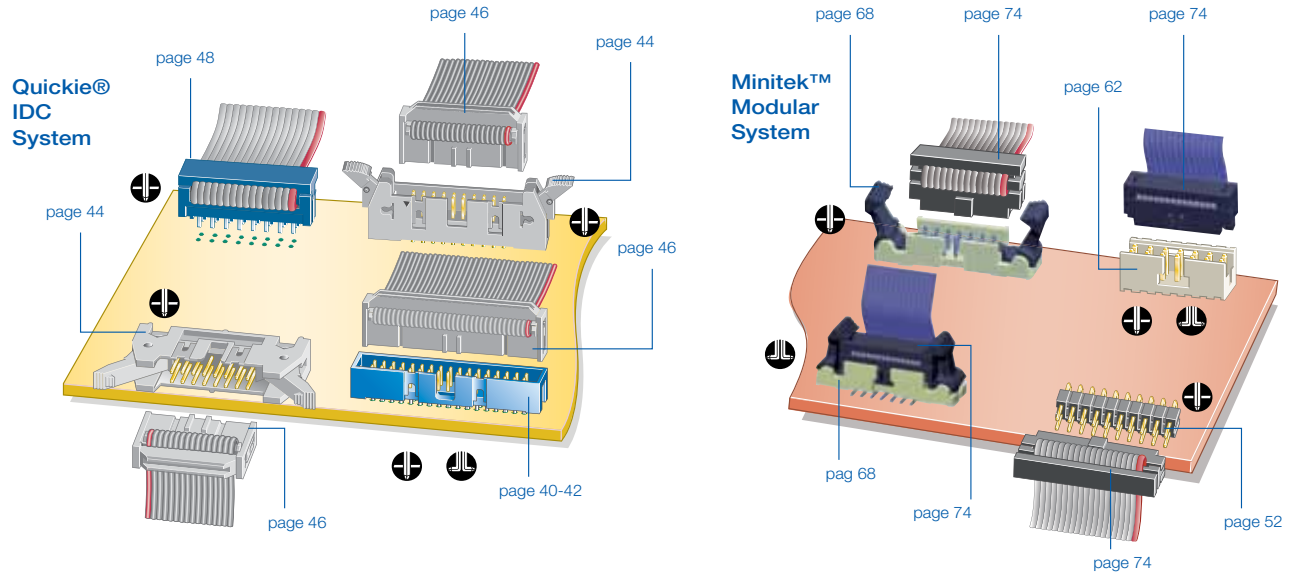
PLANAR



- = 2.54 mm
- = 2.00 mm
- = Through Mount
- = Surface Mount

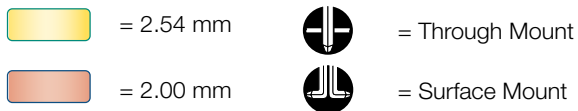
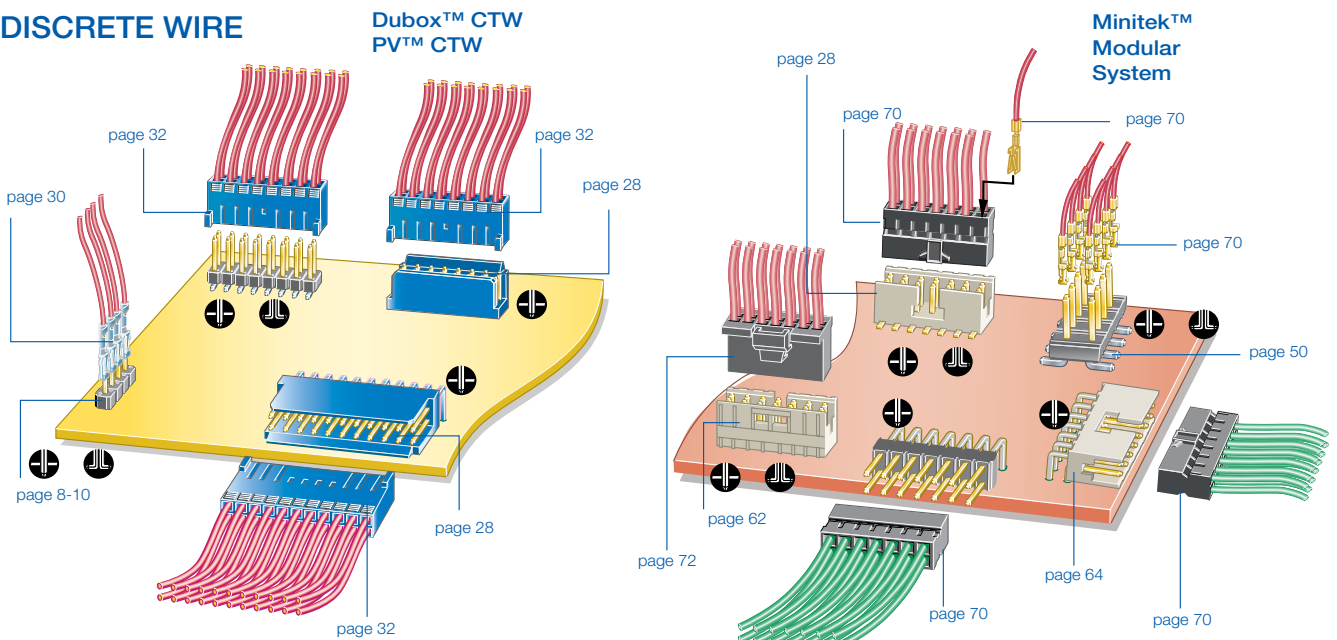
CABLE-TO-BOARD SOLUTIONS

FLAT CABLE IDC



WIRE-TO-BOARD SOLUTIONS

DISCRETE WIRE



2.54 mm (.100")

TECHNICAL DATA

PHYSICAL

- Housing: High temperature, black thermoplastic
- Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold/GXT 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: 8.8 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

REFERENCE INFORMATION

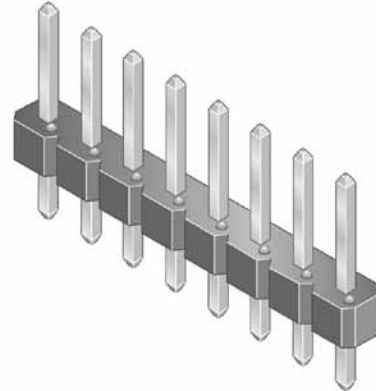
- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: BUS-12-114
specifications subject to change without notice

PROCESSING INFORMATION

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

RoHs INFORMATION

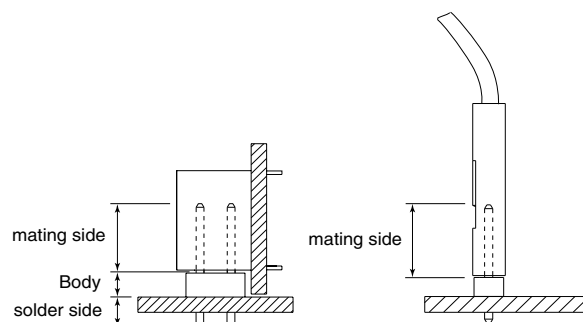
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Dubox™ Crimp-to-wire contacts	30
■ Dubox™ Crimp-to-wire housings	32
■ Dubox™ Vertical receptacles	20
■ Dubox™ Low profile vertical receptacles	22, 24
■ Dubox™ Horizontal receptacles	26
■ Quickie™ IDC receptacles	46
■ PV™ Crimp-to-Wire Contacts	36
■ PV™ Crimp-to-Wire Housings	38

TYPICAL APPLICATIONS



BergStik® Unshrouded Header, Vertical, Standard Sizes

2.54 mm (.100")

PART NUMBERS



1 = 0.76 μm (30μ") gold / GXT
 2 = 0.38 μm (15μ") gold / GXT
 4 = tin

01 to 36 = Single row
 02 to 72 = Double row

Single Row

Base PN	Post		Tail		OAL	
	mm	(inch)	mm	(inch)	mm	(inch)
68000	5.84	0.230	2.41	0.095	10.80	0.425
68001	5.84	0.230	3.05	0.120	11.43	0.450
68002	5.84	0.230	3.81	0.150	12.19	0.480
78511	8.08	0.318	3.05	0.120	13.67	0.538
68024	8.08	0.318	3.81	0.150	14.43	0.568

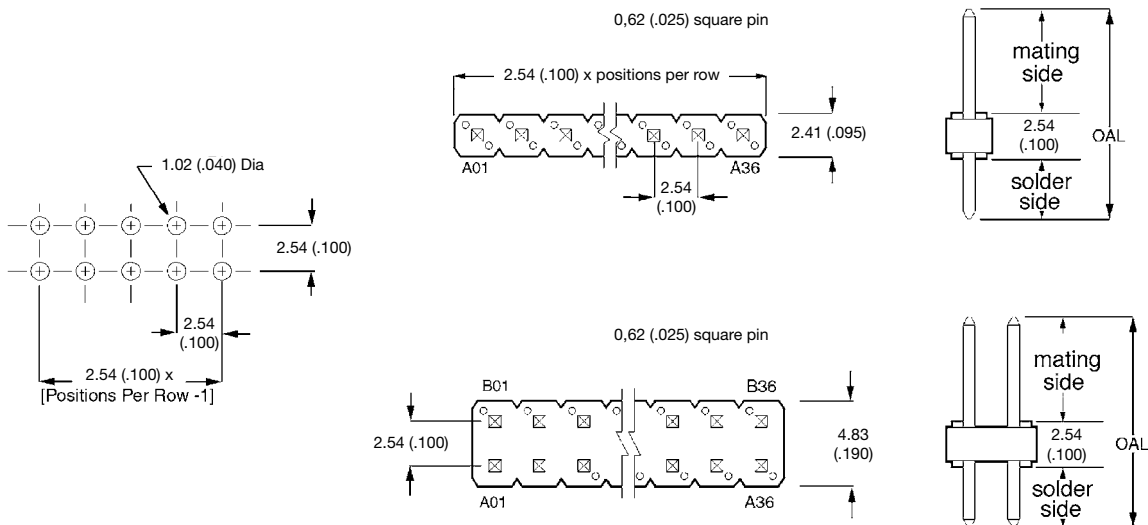
Double Row

Base PN	Post		Tail		OAL	
	mm	(inch)	mm	(inch)	mm	(inch)
67996	5.84	0.230	2.41	0.095	10.80	0.425
67997	5.84	0.230	3.05	0.120	11.43	0.450
68602	5.84	0.230	3.81	0.150	12.19	0.480
68691	8.08	0.318	3.05	0.120	13.67	0.538
78233	8.08	0.318	3.81	0.150	14.43	0.568

68000 - 1XXHLF
 68001 - 1XXHLF
 68002 - 1XXHLF
 XX = 04, 06, 08, 10, 12, 16, 20

67996 - 1XXHLF
 67997 - 1XXHLF
 68602 - 1XXHLF
 XX = 04, 06, 08, 10, 12, 16, 20

PRODUCT



Dimension : mm (inch)

TECHNICAL DATA

PHYSICAL

- Housing: High temperature, black thermoplastic
- Flammability rating: UL 94 V-0
- Pin: Phosphor-bronze
- Plating: Gold/GXT 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

- 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

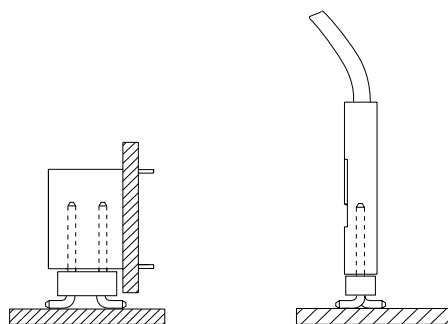
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Dubox™ Crimp-to-wire contacts	30
■ Dubox™ Crimp-to-wire housings	32
■ Dubox™ Vertical receptacles	20
■ Dubox™ Low profile vertical receptacles	22, 24
■ Dubox™ Horizontal receptacles	26
■ Quickie™ IDC receptacles	46
■ PV™ Crimp-to-Wire Contacts	36
■ PV™ Crimp-to-Wire Housings	38

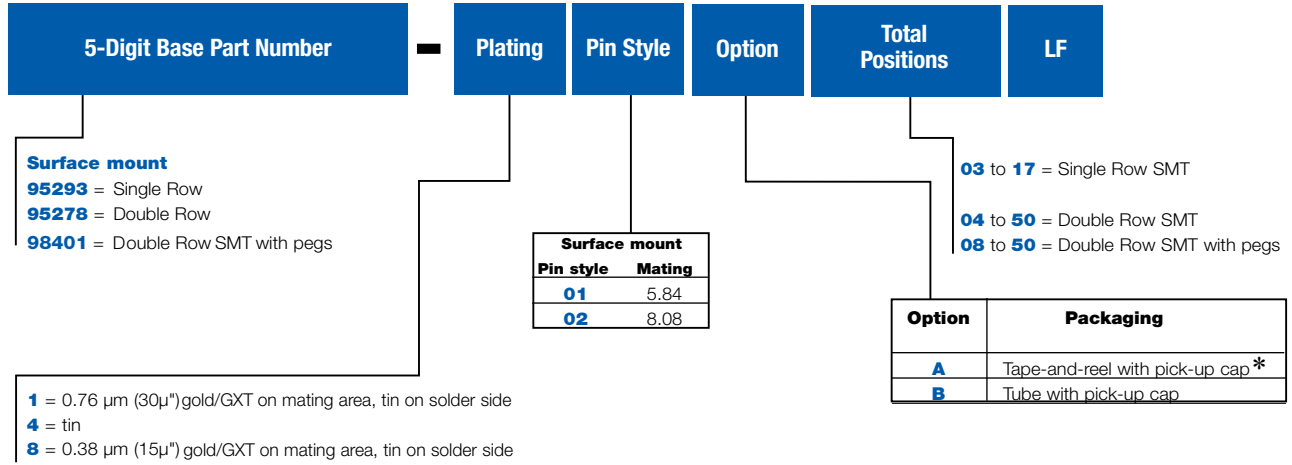
TYPICAL APPLICATIONS



BergStik® Unshrouded Header, Vertical, Surface Mount

2.54 mm (.100")

PART NUMBERS

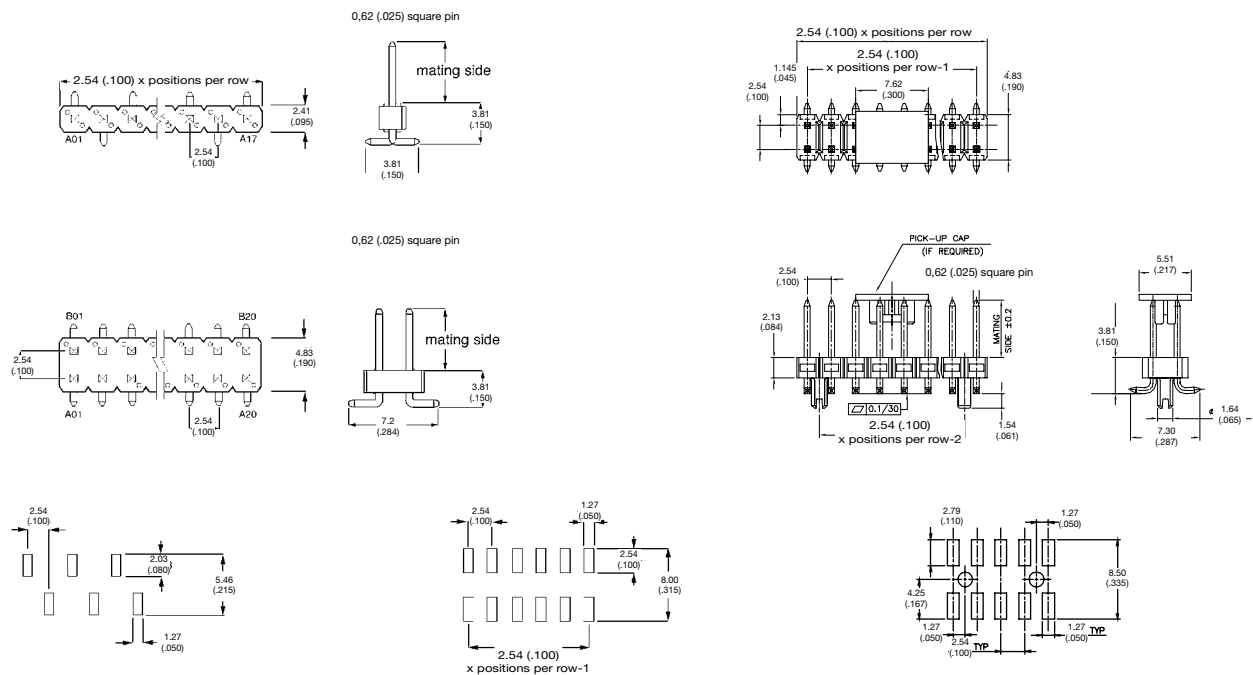


95278 - 101 A XXLF
 XX = 04, 06, 08, 10, 12, 16, 20

CORE RANGE

*as available

PRODUCT



Dimension : mm (inch)

Recommended PCB layouts

FEATURES

- 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/GXT or tin over 1.27 μm (50 μin) 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

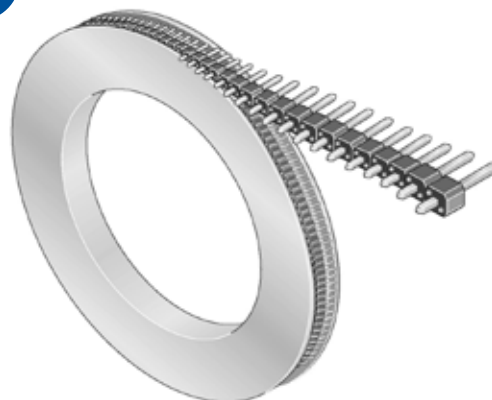
- File no. E66906
- File no. LR46923
- Product drawing: 54101 or 54102
- Product specification: BUS-12-059

PROCESSING INFORMATION

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

RoHs INFORMATION

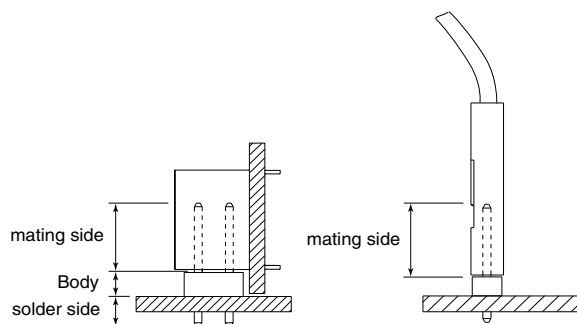
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Dubox™ Crimp-to-wire contacts	30
■ Dubox™ Crimp-to-wire housings	32
■ Dubox™ Vertical receptacles	20
■ Dubox™ Low profile vertical receptacles	22, 24
■ Dubox™ Horizontal receptacles	26
■ Quickie™ IDC receptacles	46
■ PV™ Crimp-to-Wire Contacts	36
■ PV™ Crimp-to-Wire Housings	38

TYPICAL APPLICATIONS



BergStrip® Unshrouded Header, Continuous

2.54 mm (.100")

PART NUMBERS



- 1 = 0.76µm (30µ") gold /GXT
- 2 = 0.38µm (15µ") gold / GXT
- 4 = tin

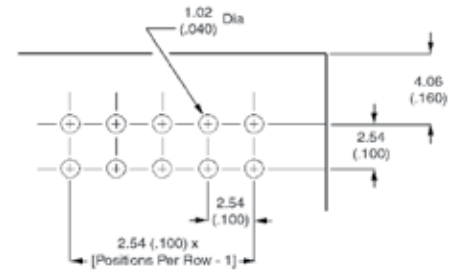
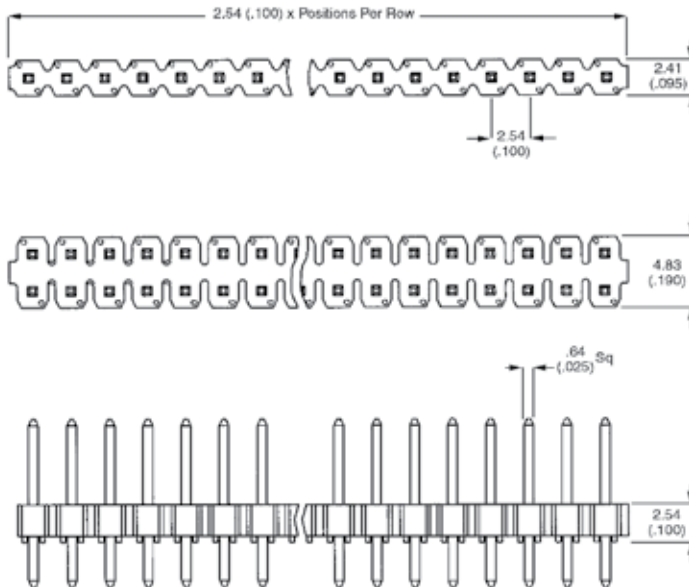
Single Row

Base PN	mating side		solder side		OAL	
	mm	(in.)	mm	(in.)	mm	(in.)
68000	5.84	0.230	2.41	0.095	10.80	0.425
68001	5.84	0.230	3.05	0.120	11.43	0.450
68002	5.84	0.230	3.81	0.150	12.19	0.480

Double Row

Base PN	mating side		solder side		OAL	
	mm	(in.)	mm	(in.)	mm	(in.)
67996	5.84	0.230	2.41	0.095	10.80	0.425
67997	5.84	0.230	3.05	0.120	11.43	0.450
68602	5.84	0.230	3.81	0.150	12.19	0.480

PRODUCT



Recommended PCB layouts

Dimension : mm (inch)

2.54 mm (.100")

FEATURES

- 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 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: 8.8 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

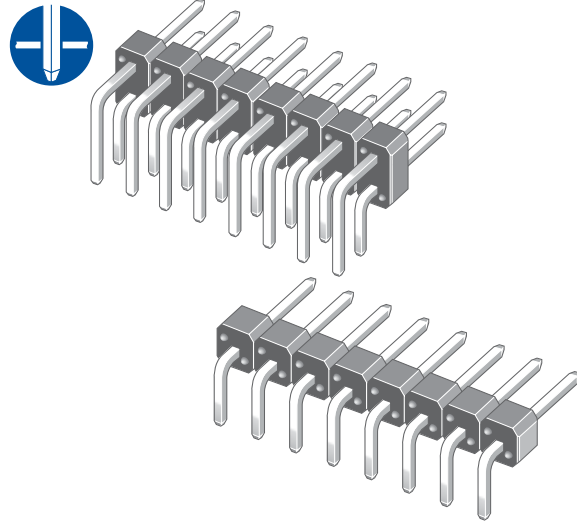
- File no. E66906
- File no. LR46923
- Product drawing: 55101 or 55102
- Product specification: BUS-12-114

PROCESSING INFORMATION

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

RoHs INFORMATION

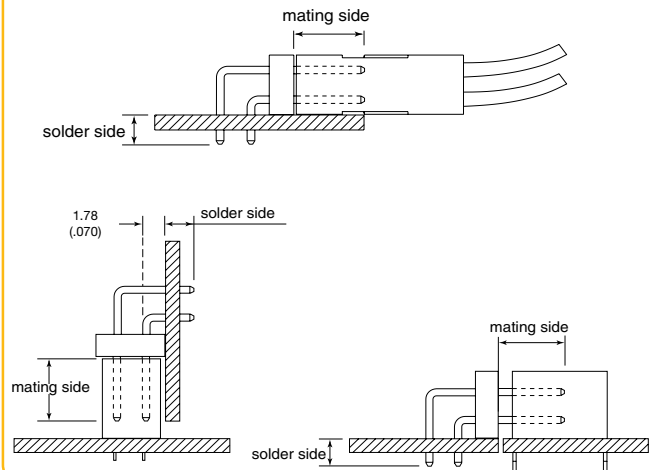
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

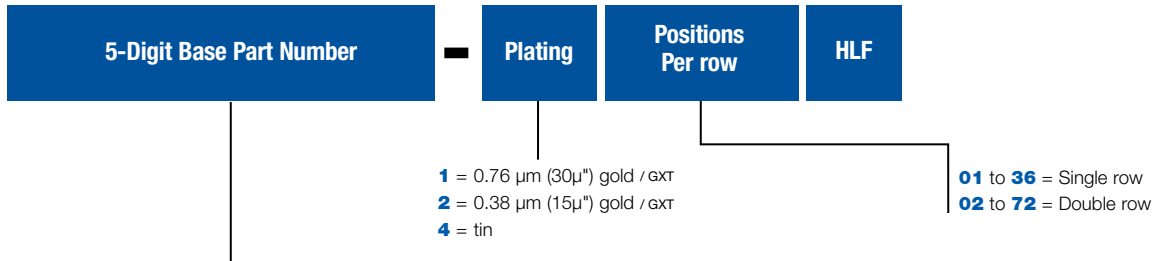
■ Dubox™ Crimp-to-wire contacts	30
■ Dubox™ Crimp-to-wire housings	32
■ Dubox™ Vertical receptacles	20
■ Dubox™ Low profile vertical receptacles	22, 24
■ Dubox™ Horizontal receptacles	26
■ Quickie™ IDC receptacles	46
■ PV™ Crimp-to-Wire Contacts	36
■ PV™ Crimp-to-Wire Housings	38

TYPICAL APPLICATIONS



BergStik® Unshrouded Header, Right Angle, Standard Sizes

PART NUMBERS



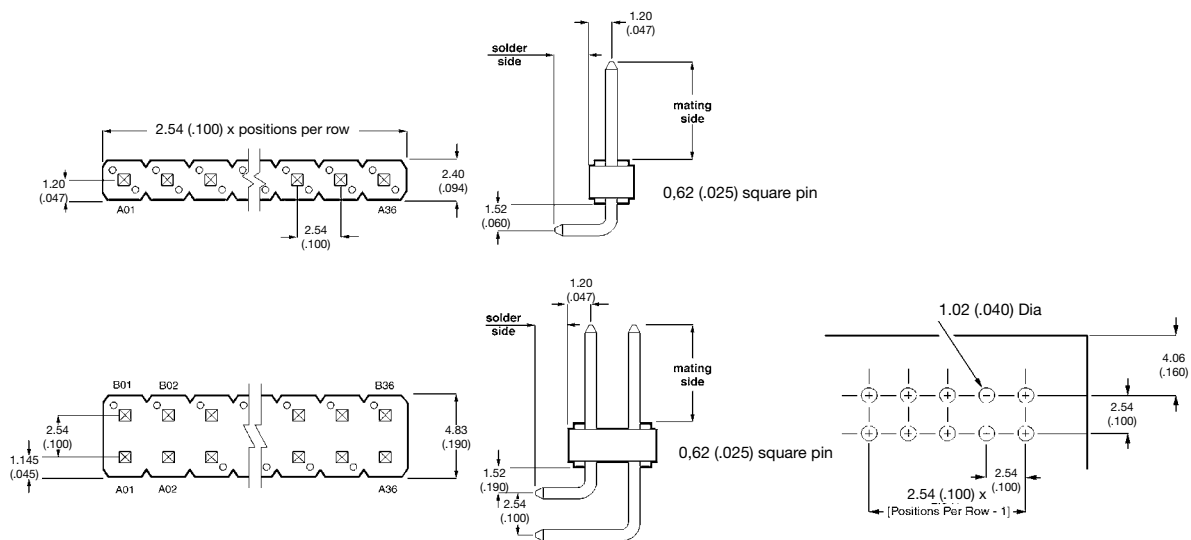
Single Row

Base PN	mating side		solder side	
	mm	(in.)	mm	(in.)
68015	5.84	0.230	2.41	0.095
68016	5.84	0.230	3.05	0.120

Double Row

Base PN	mating side		solder side	
	mm	(in.)	mm	(in.)
68020	5.84	0.230	2.41	0.095
68021	5.84	0.230	3.05	0.120

PRODUCT



Dimension : mm (inch)

FEATURES

- 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/GXT or tin over 1.27 μm (50 μin) 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

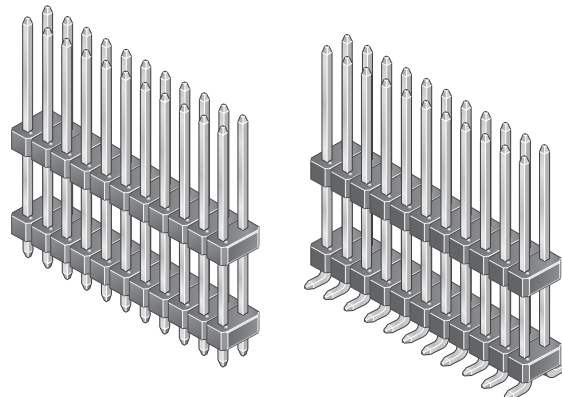
- File no. E66906
- File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: BUS-12-114

PROCESSING INFORMATION

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

RoHs INFORMATION

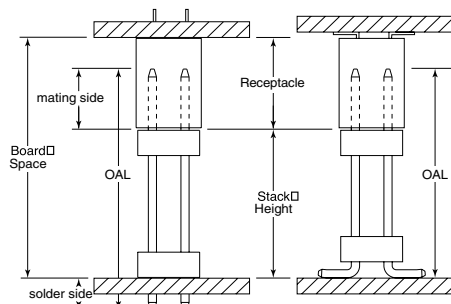
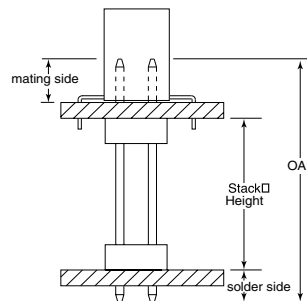
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- Dubox™ Vertical receptacles 20
- Dubox™ Low profile vertical receptacles 22, 24

TYPICAL APPLICATIONS



BergStik® Unshrouded Header, Stacking

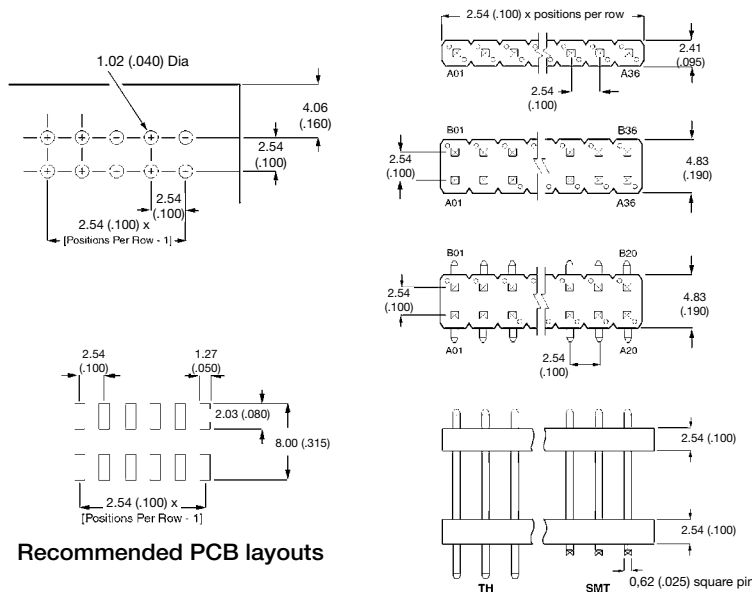
PART NUMBERS

Compile your own part number using custom dimensions (Please allow for initial setup on our system)

5	4	Lead	Solder Side Option	Row Option	Plating	Pin Style	Total Positions	Stack Height	LF
	1 = Through Hole (TMT) 2 = Surface Mount (SMT)	1 = 2.41 mm 2 = 3.05 mm 4 = SMT (double row only)		1 = Single Row (TMT only) 2 = Double Row		02 to 36 single row (TMT) 04 to 72 double row (TMT) 04 to 50 double row (SMT)			
									XX.XX = mm Specify mm i.e. 08.50 = 8.50 mm in 0.50 mm increments TMT = 08.00 min. - 25.00 max. SMT = 09.50 min. - 26.00 max.

Pin Styl	Overall length (TMT)	Overall length (SMT)
01	12.20 (.480)	10.42 (.410)
02	13.50 (.531)	11.72 (.461)
03	15.90 (.626)	14.12 (.556)
04	16.76 (.660)	14.98 (.590)
05	17.65 (.695)	15.87 (.525)
06	18.91 (.744)	17.13 (.674)
07	20.96 (.825)	19.18 (.755)
08	23.50 (.925)	21.72 (.855)
09	26.04 (1.025)	24.26 (.955)
10	28.58 (1.125)	26.80 (1.055)
11	31.12 (1.225)	29.34 (1.155)
12	33.66 (1.325)	31.88 (1.255)

PRODUCT



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

Dimension : mm (inch)

FEATURES

- 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: thermoplastic
69145 color black
68786 and 63429 color white
- Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold/GXT or tin over 1.27 μm (50 μm) nickel



low profile only

ELECTRICAL PERFORMANCE

- Current rating: 2.5 A max. per contact
 - Insulation resistance: 50,000 $\text{M}\Omega$ min.
 - Contact resistance: 15 $\text{M}\Omega$ max. initial, 20 $\text{M}\Omega$ 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

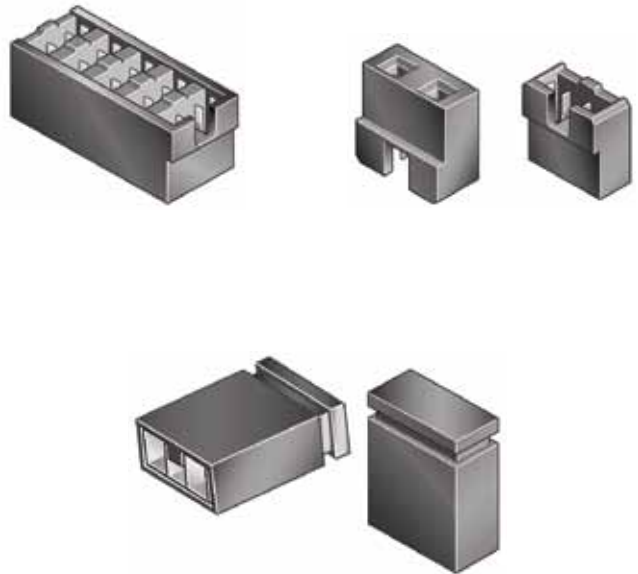
- Plastic bags

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



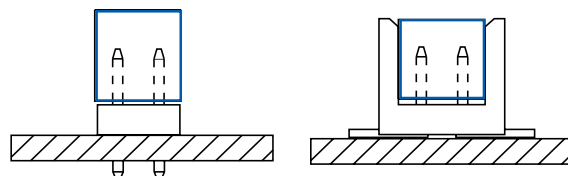
MATING DATA

- Continuous unshrouded headers 12
- Unshrouded vertical headers 8, 10
- Unshrouded right angle headers 14, 16

INSERTION DEPTH

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

TYPICAL APPLICATIONS



SHUNTS

2.54 mm (.100")

PART NUMBERS

Low profile



2 = 0.76 μm (30μ") gold/ext
3 = tin

Standard



2 = 0.76 μm (30μ") gold/GXT
3 = tin

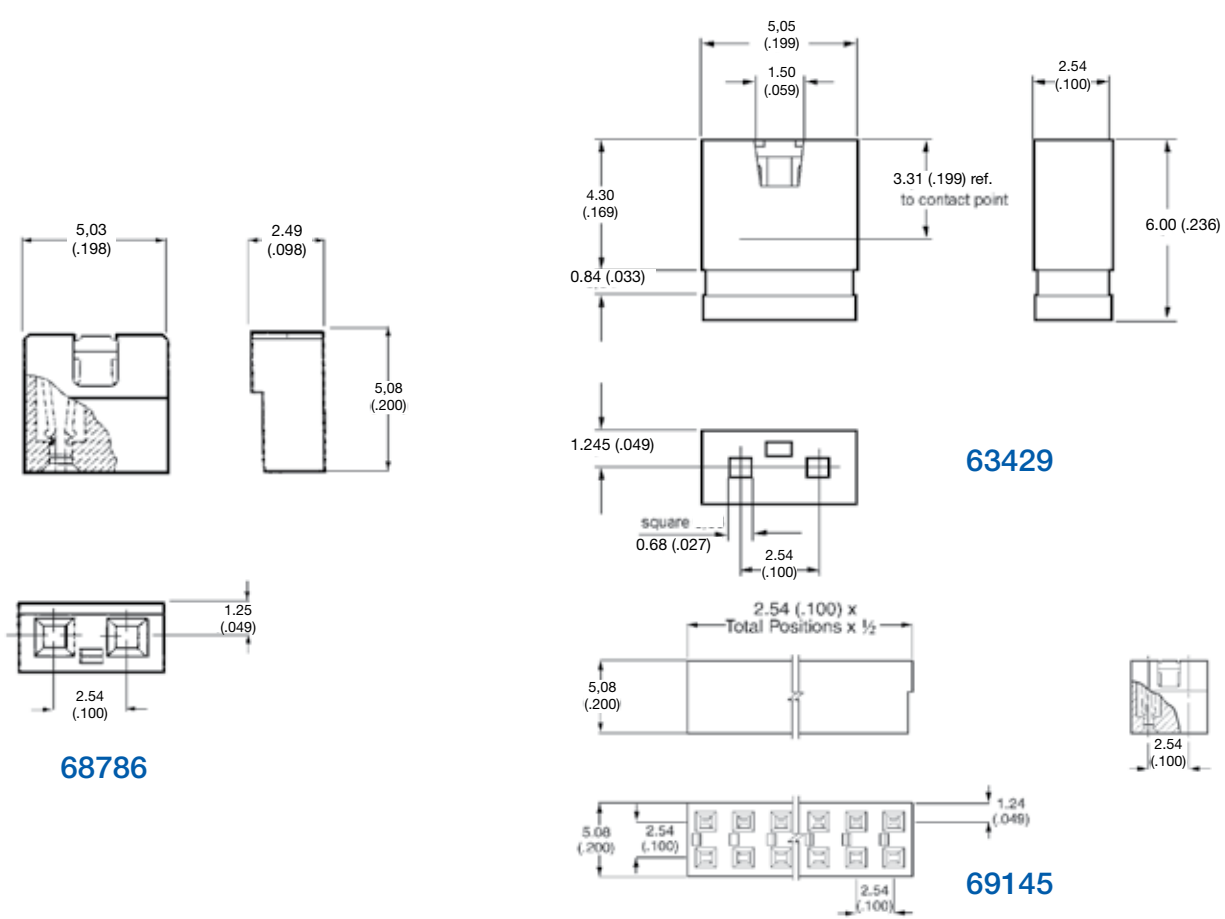
Multi-position



2 = 0.76 μm (30μ") gold / ext | 4 to 20 positions
3 = tin



PRODUCT



Dimension : mm (inch)

FEATURES

- 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/GXT or tin in accordance with IEC 603-81

ELECTRICAL PERFORMANCE

- Current rating: 3 A dc max. per individual contact
2 A dc max. per contact for fully energized connector
- Insulation resistance: $1 \times 10^5 \text{ M}\Omega$ min.
- Contact resistance: 15 $\text{M}\Omega$ max. initial,
20 $\text{M}\Omega$ 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

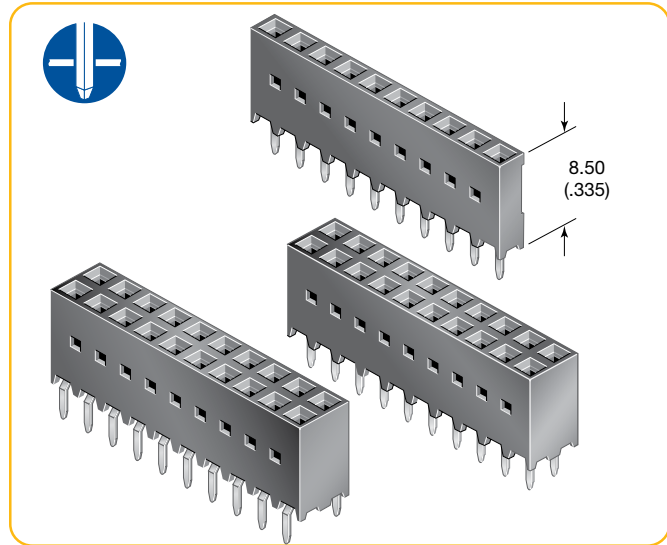
- Compatible with wave soldering processes

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



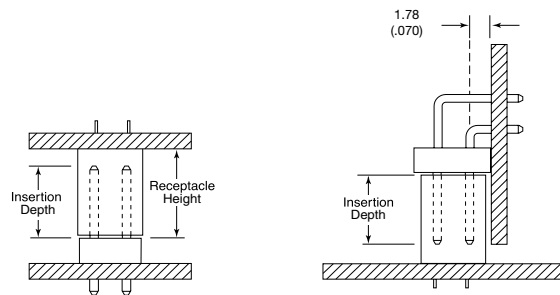
MATING DATA

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

INSERTION DEPTH

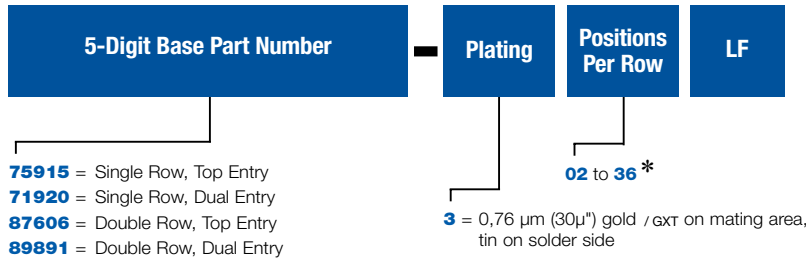
- Top Entry: 3.6 mm min. to 6.81 mm max.
[provides .381 mm wipe]
- Bottom Entry: 7 mm min.
[provides .381 mm wipe] plus board thickness

TYPICAL APPLICATIONS



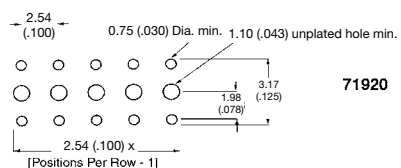
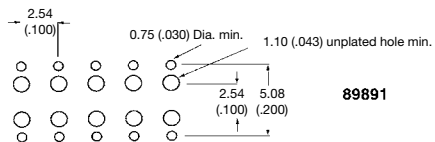
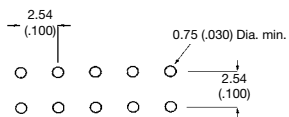
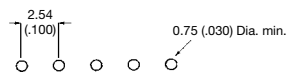
Dubox™ Vertical Receptacles

PART NUMBERS

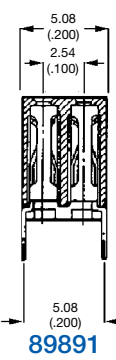
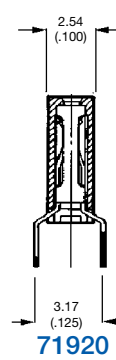
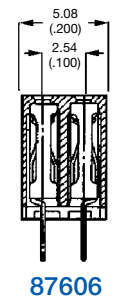
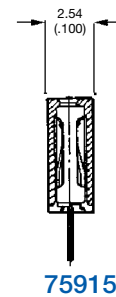
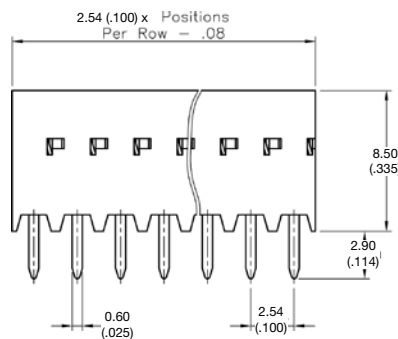


*Other sizes available on request

PRODUCT



Recommended PCB layouts



Dimension : mm (inch)

2.54 mm (.100")

FEATURES

- 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/GXT 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

PROCESSING INFORMATION

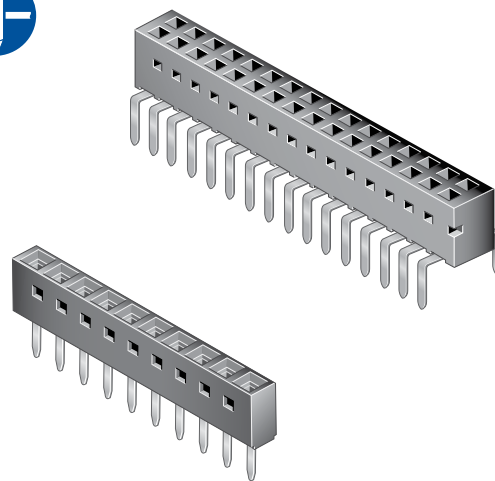
- Compatible with wave soldering processes

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



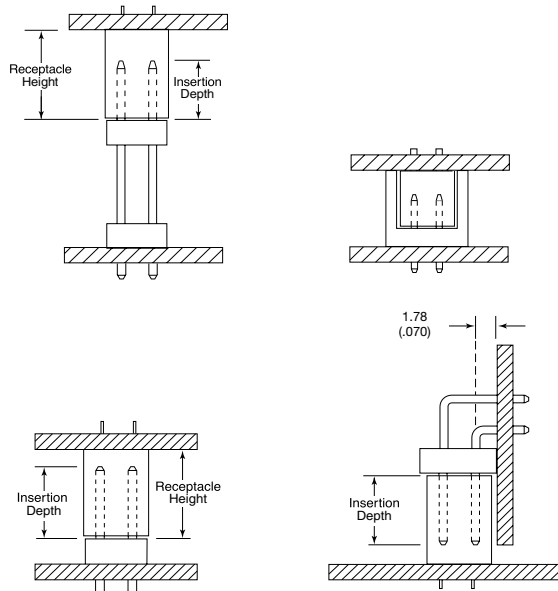
MATING DATA

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

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

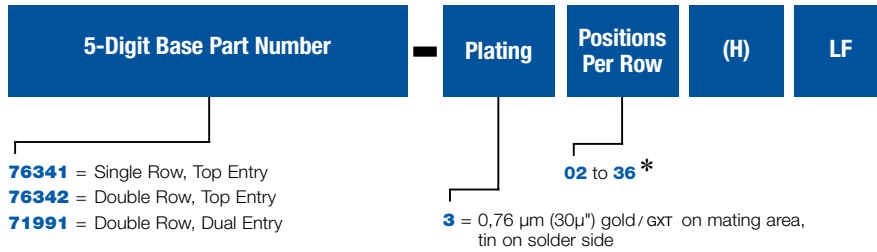
TYPICAL APPLICATIONS



Dubox™ Vertical Receptacles, Low Profile

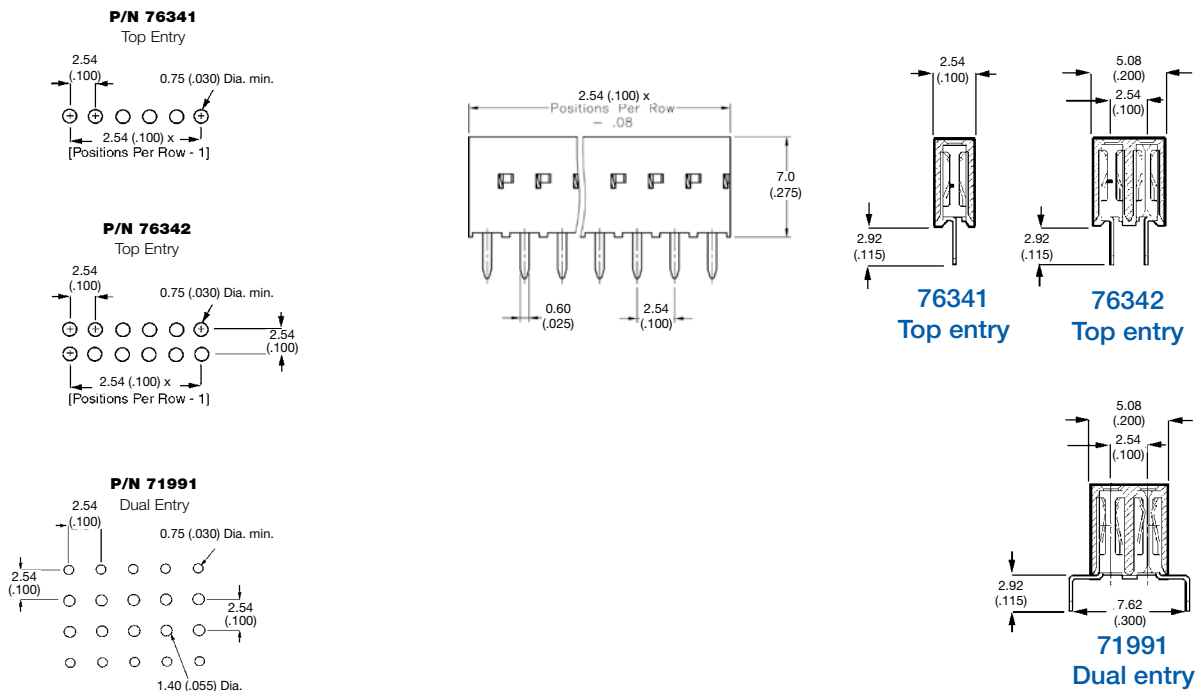
2.54 mm (.100")

PART NUMBERS



*Other sizes available on request

PRODUCT



Recommended PCB layouts

Dimension : mm (inch)

FEATURES

- 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/GXT 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

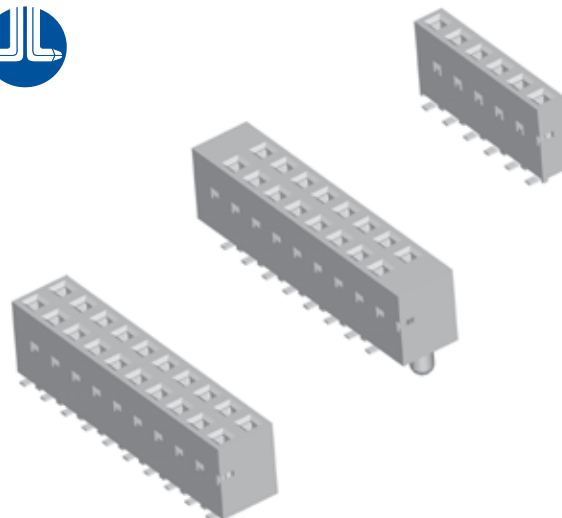
- Compatible with vapor-phase, and IR reflow soldering processes

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



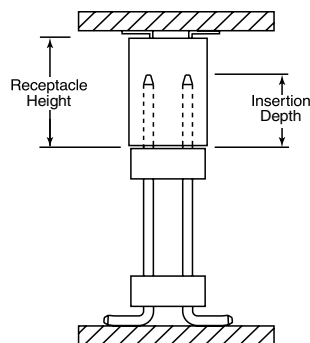
MATING DATA

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

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

TYPICAL APPLICATIONS



Dubox™ Vertical Receptacles, Low Profile

PART NUMBERS

5-Digit Base Part Number	Plating	Positions Per Row	Option	LF
<p>91601 = Single Row, Dual Entry</p> <p>91614 = Single Row with external Locating Pegs, Dual Entry</p> <p>89898 = Double Row, Dual Entry</p> <p>91615 = Double Row with External Locating Pegs, Dual Entry</p> <p>91618 = Double Row with Internal Locating Pegs, Dual Entry</p>			<p>- = standard-tubes</p> <p>A = Tape-and-Reel packaging with pick-up cap *</p> <p>02 to 25 Single Row</p> <p>02 to 25 Double Row</p> <p>3 = 0,76 µm (30µ") gold/GXT on mating area, tin on solder side</p>	

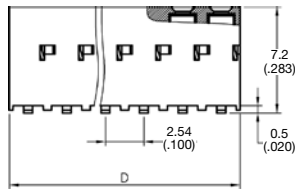
89898 - 3XXALF **CORE RANGE**

XX = 02, 03, 04, 05, 06, 08, 10

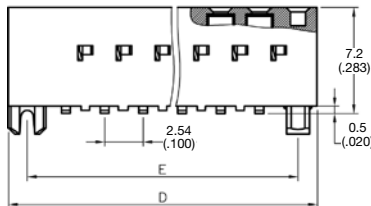
* as available

PRODUCT

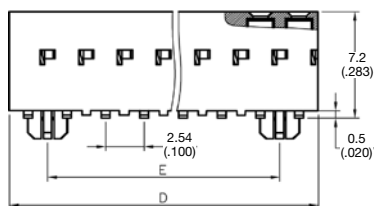
Standard



External Locating Pegs

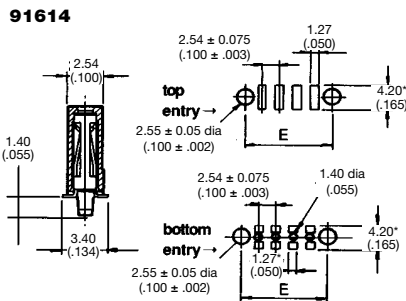
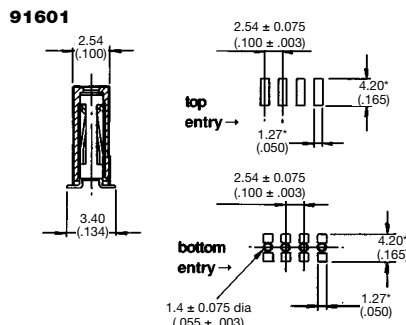


Internal Locating Pegs



Dimension : mm (inch)

Single Row + Pad lay-outs

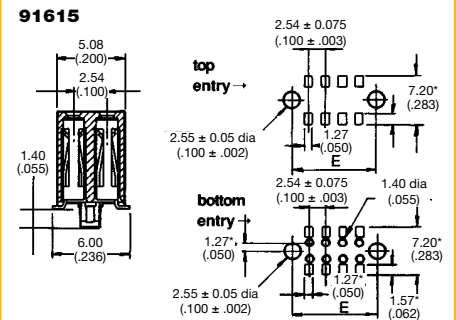
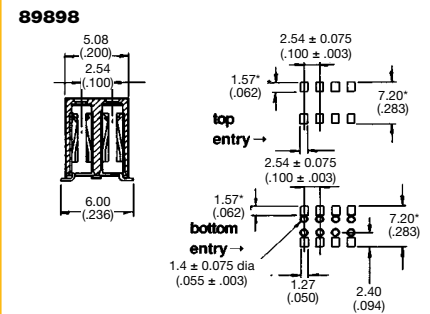


*Note: available as of 3 position versions

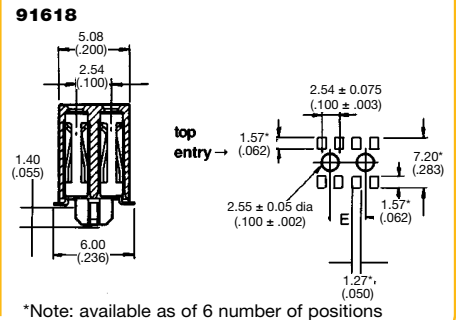
not available in single row

Note:
All dimensions marked with *
are minimum dimensions

Double Row + Pad lay-outs



*Note: available as of 3 position versions



*Note: available as of 6 number of positions

FEATURES

- 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/GXT 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: 1×10^5 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

- Standard: Tubes
- Optional: Tape-and-reel

PROCESSING INFORMATION

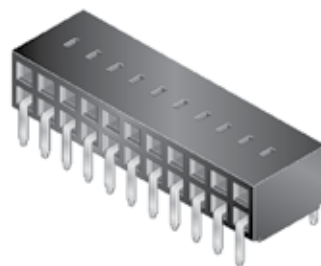
- Series 89882, 89883: compatible with wave soldering processes
- Series 71607, 71609: compatible with vapor-phase and IR reflow soldering processes

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



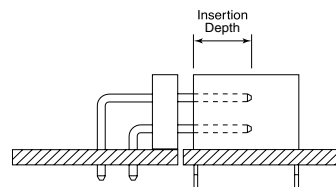
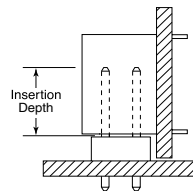
MATING DATA

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

INSERTION DEPTH

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

TYPICAL APPLICATIONS



Dubox™ Horizontal Receptacles

PART NUMBERS

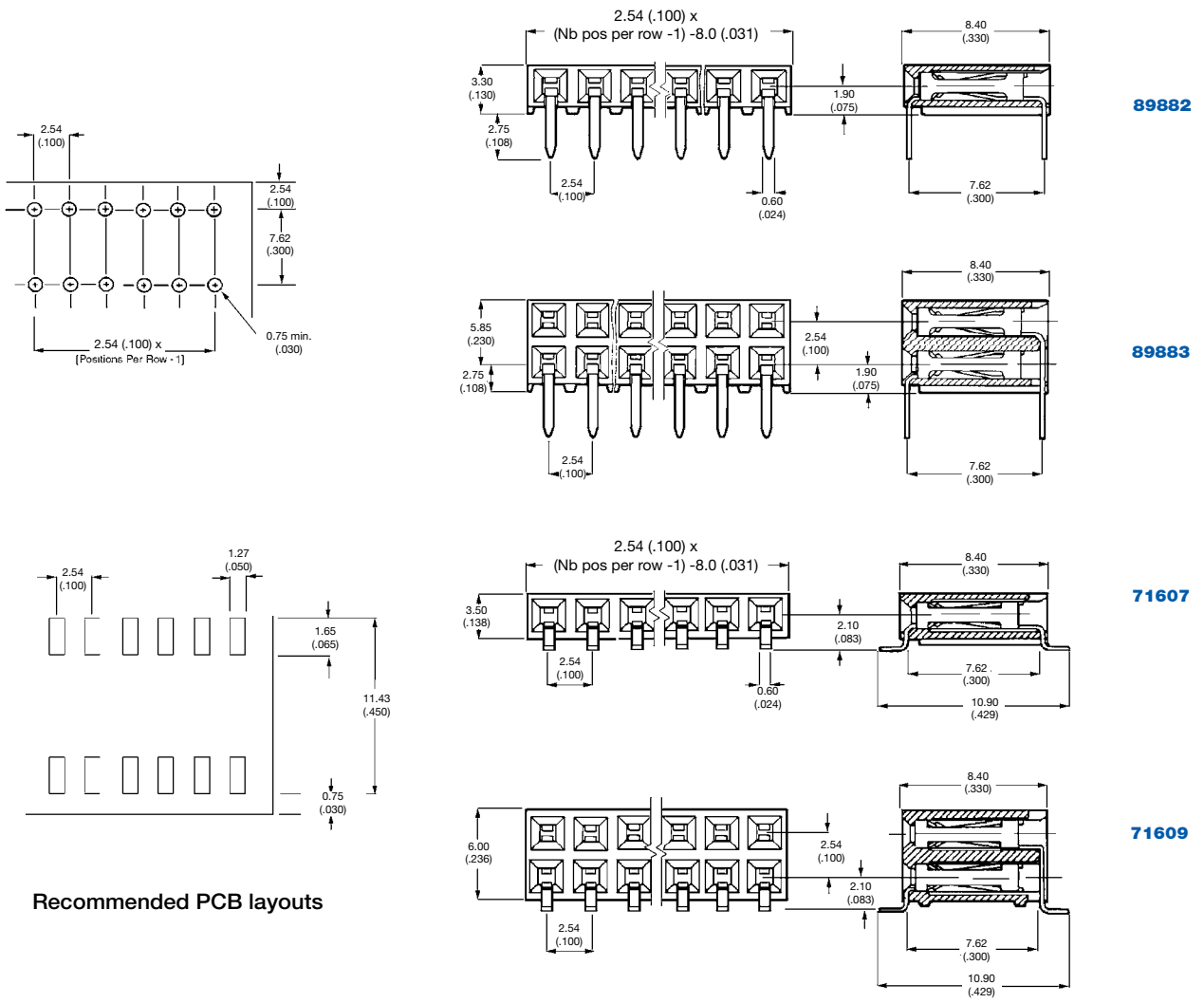


- 89882** = Through Hole (TMT), Single Row
- 89883** = Through Hole (TMT), Double Row
- 71607** = Surface Mount (SMT), Single Row
- 71609** = Surface Mount (SMT), Double Row

- 02 to 36** (TMT)
- 02 to 25** (SMT)

3 = 0,76 µm (30µ") gold/GXT on mating area, tin on solder side

PRODUCT



Recommended PCB layouts

Dimension : mm (inch)

FEATURES

- 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/GXT or tin over 1.27 μm (50μ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- Insulation resistance: 1 x 10⁵ 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

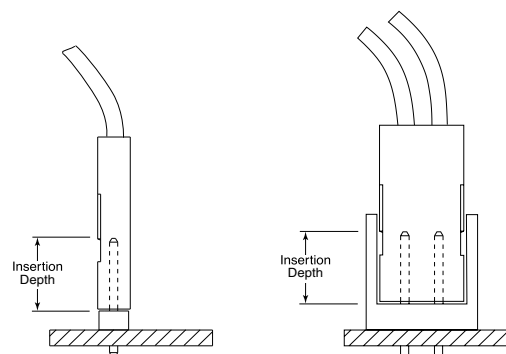
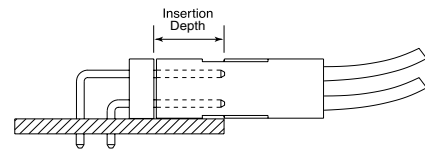
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- Dubox™ Crimp-to-wire contacts 30
- Dubox™ Crimp-to-wire housings 32

TYPICAL APPLICATIONS



Dubox™ Shrouded Headers

PART NUMBERS



- 76384** = Single row, straight
- 76382** = Single row, right angle
- 76385** = Double row, straight
- 76383** = Double row, right angle

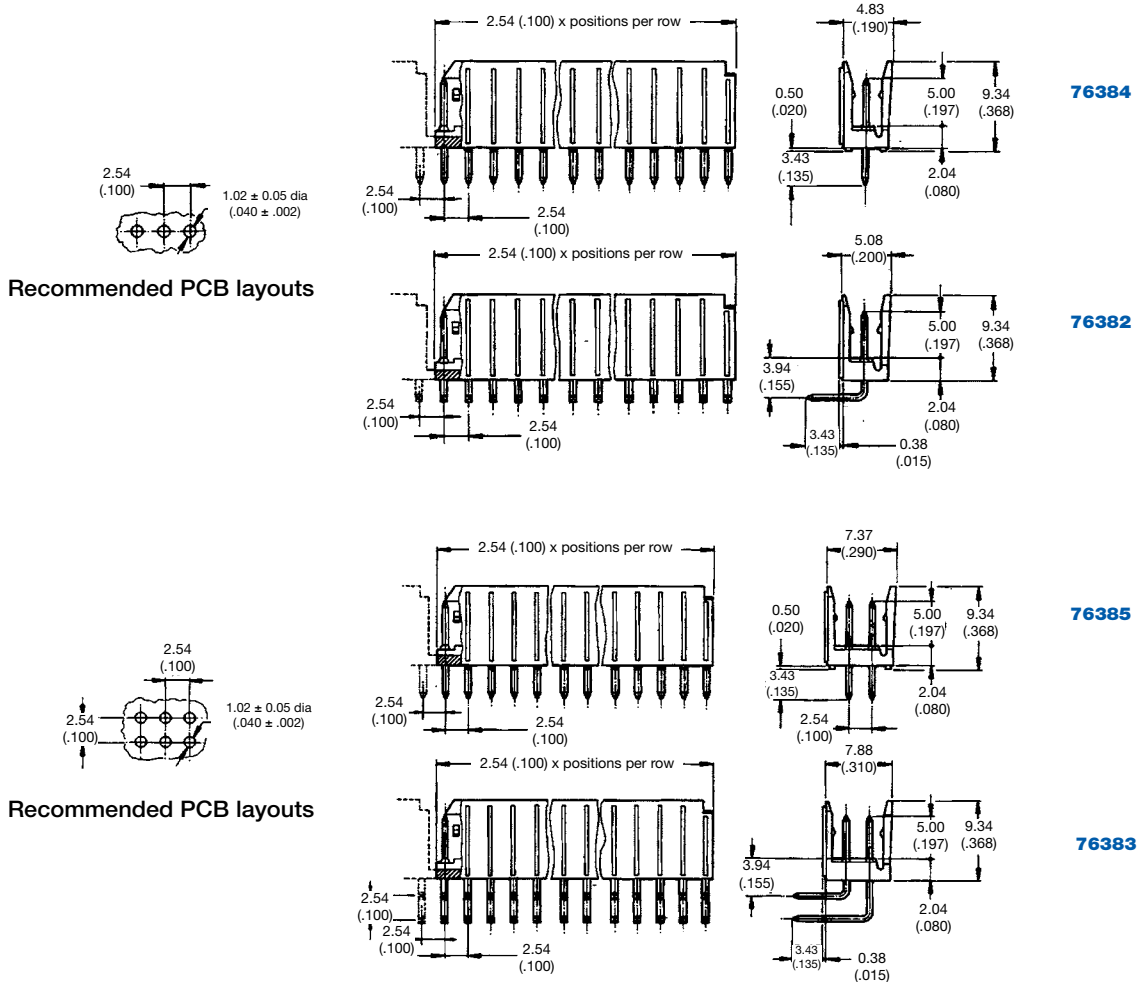
02 up to 18

3 = 0.76 μm (30μ") gold/GXT on mating area, tin on solder side
4 = tin

76384 - **3XXLF** **CORE RANGE**
76385 - **3XXLF**

XX = 02, 03, 04, 05, 06, 08, 10

PRODUCT



Dimension : mm (inch)

FEATURES

- 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/GXT 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

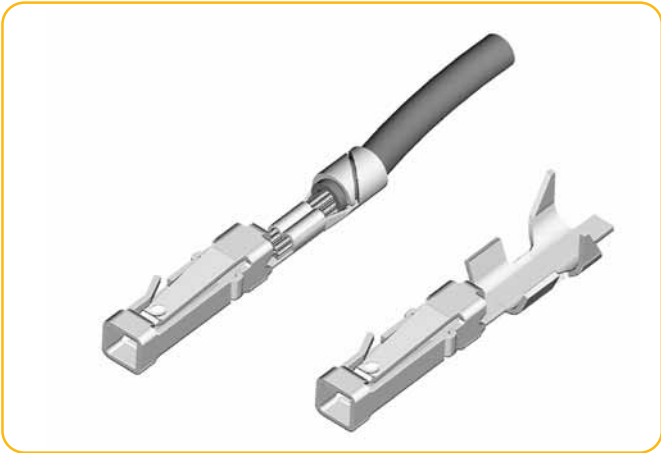
- 1 Reels
- Boxes - Loose piece

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



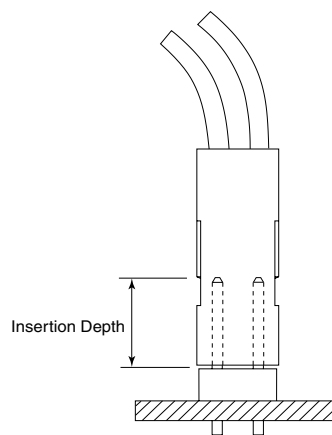
MATING DATA

- BergStik® unshrouded straight headers 8, 10
- BergStik® unshrouded right angle headers 14
- Dubox™ shrouded vert./ra. headers 28
- 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]

TYPICAL APPLICATIONS



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 (.035 - .059)	76347-301LF	76347-401LF	15.000/reel
22-30	0.90 - 1.50 (.035 - .059)	76347-302 LF•	76347-402LF•	15.000/reel
22-30	0.90 - 1.50 (.035 - .059)	76347-303 LF	76347-403LF	500/reel
20-22	1.10 - 1.60 (.043 - .062)	76347-311LF	76347-411LF	15.000/reel
20-22	1.10 - 1.60 (.043 - .062)	76347-312 LF•	76347-412LF•	15.000/reel

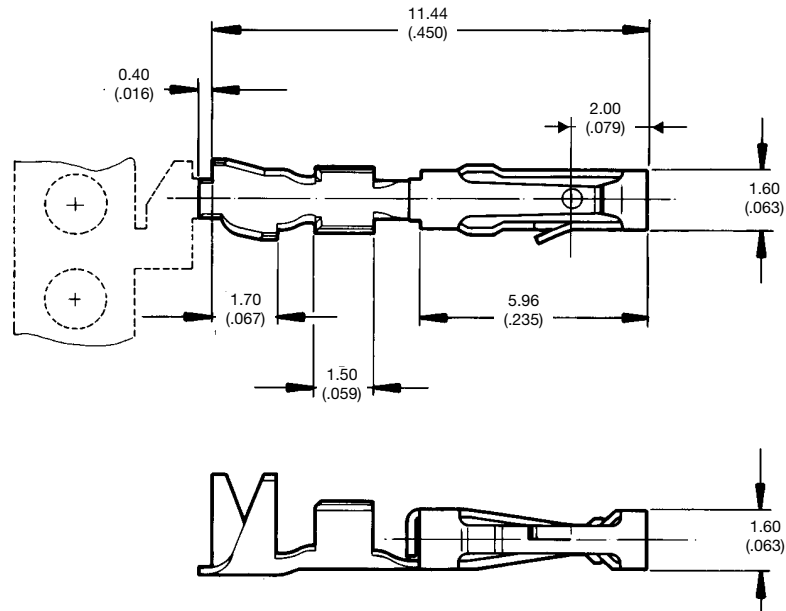
Part numbers / Contacts loose Piece

Wire size	insulation O.D.	Selective Gold Plated	Tin plated	Packaging
22-30	0.90 - 1.50 (.035 - .059)	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 ± 0.25 (.118 ± .010)

Mating pin size = 0.62 (.024) square

Mating pin recommended length = 5.00 (.197) min.

Dimension : mm (inch)

FEATURES

- 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: $1 \times 10^5 \text{ M}\Omega$ min.
- Dielectric withstanding voltage: 1000 V rms

OPERATING TEMPERATURE RANGE

- -65°C to +125°C



PACKAGING

- Bulk

PROCESSING INFORMATION

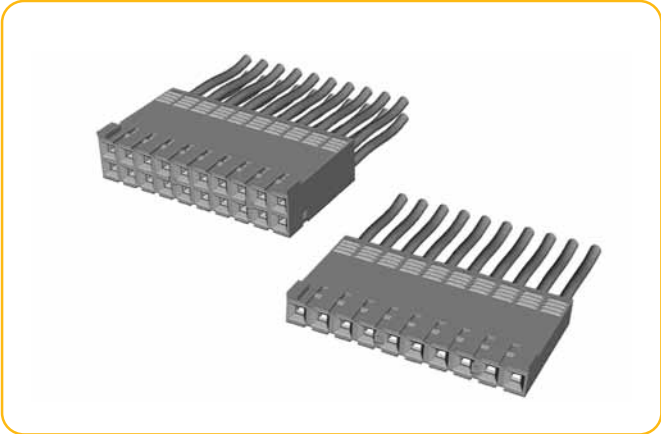
- Compatible with wave soldering processes

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



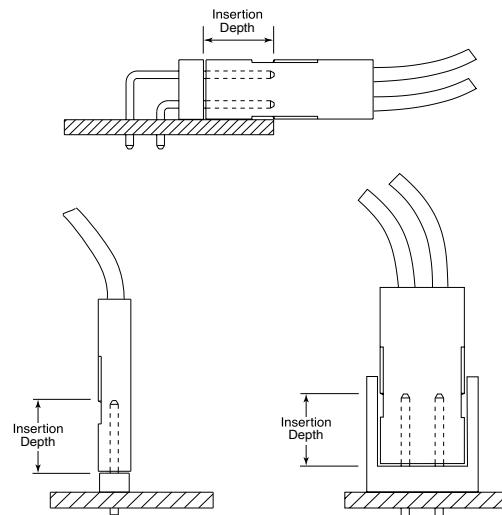
MATING DATA

- BergStik® unshrouded straight headers 8, 10
- BergStik® unshrouded right angle headers 14
- Dubox™ shrouded vert./ra. headers 28

INSERTION DEPTH

- 3.6 mm min. to 6.0 mm max.

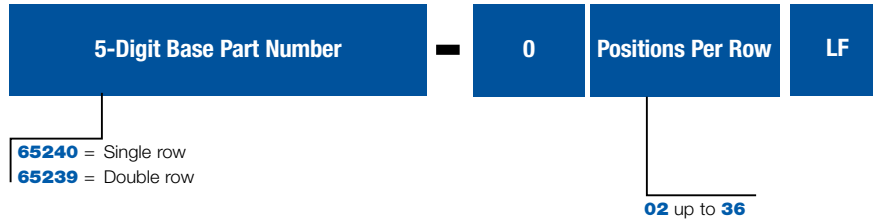
TYPICAL APPLICATIONS



Dubox™ Crimp-to-Wire Housings

2.54 mm (.100")

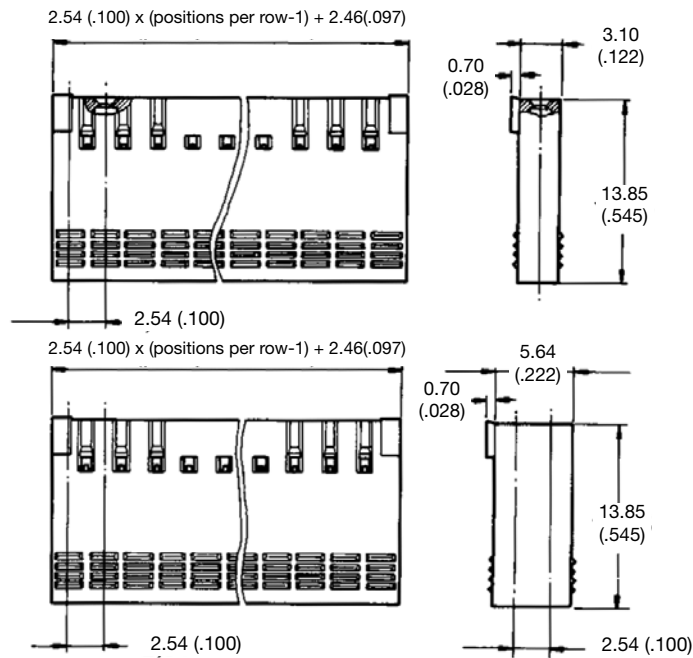
PART NUMBERS



65239 - 0XXLF **CORE RANGE**
XX = 02, 03, 04, 05, 06, 08, 10

65240 - 0XXLF
XX = 04, 06, 08, 10, 12, 16, 20

PRODUCT



- Pin size: 0.62 (.024) square
- Recommended pin length: 5.00 (.197) min.

Dimension : mm (inch)

FEATURES

- 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/GXT or tin-lead over 1.27 µm (50 µ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous
- Insulation resistance: 1×10^5 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

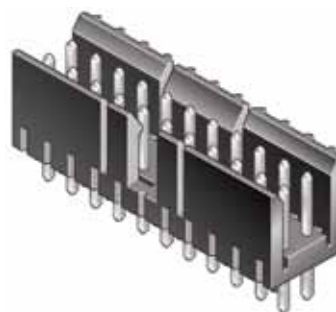
- Compatible with wave soldering processes

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

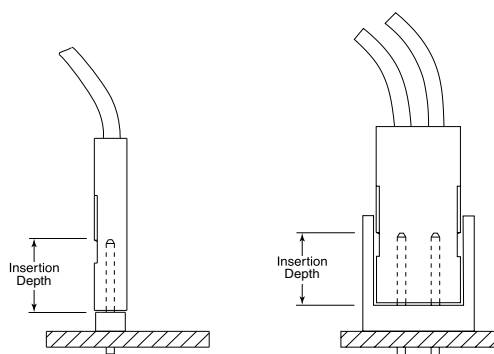
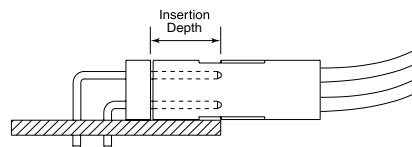
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

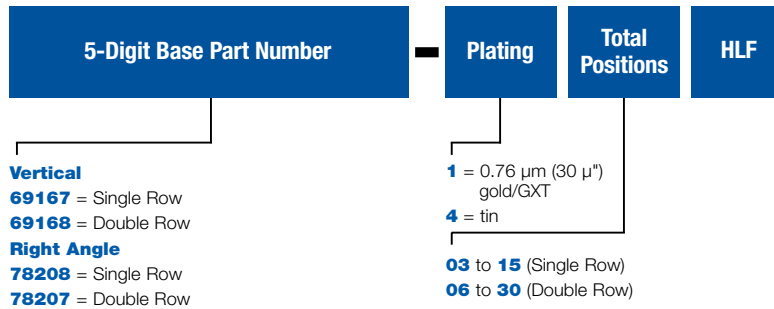
- PV™ Crimp-to-wire contacts 36
- PV™ Crimp-to-wire housings 38

TYPICAL APPLICATIONS

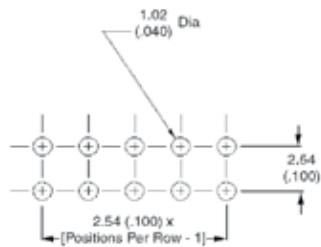


PV™ Shrouded Headers

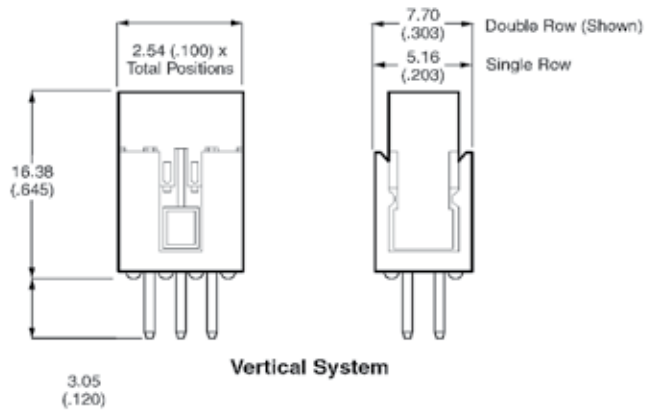
PART NUMBERS



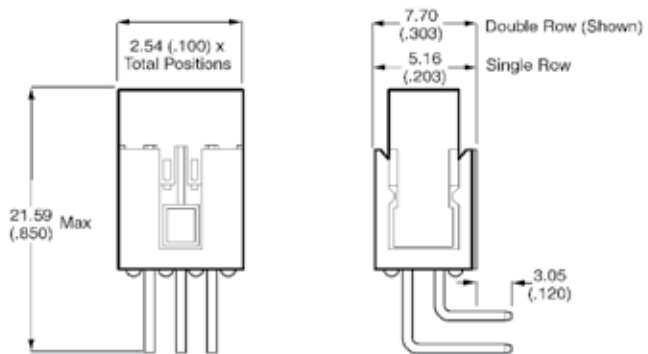
PRODUCT



Recommended PCB layouts



Vertical System



Right Angle System

Dimension : mm (inch)

2.54 mm (.100")

FEATURES

- 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/GXT or tin over 1.27 µm (50 µ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 3 A continuous depending on wire size
- Insulation resistance: 5000 mΩ 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

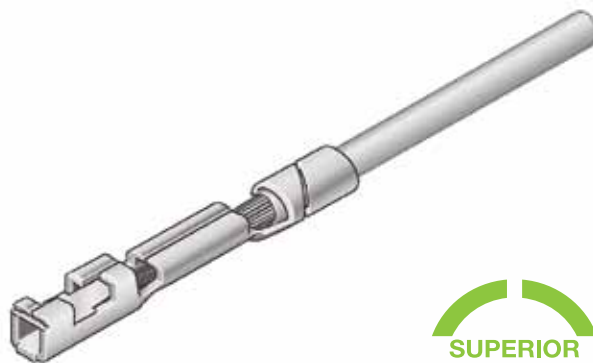
- 1 Reels
- Boxes - Loose piece

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



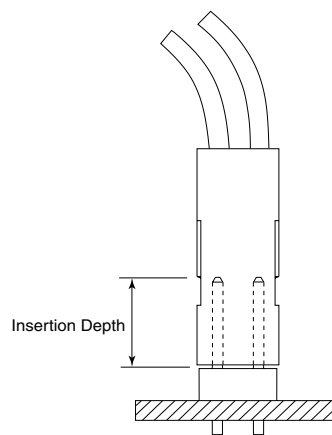
MATING DATA

- Continuous unshrouded headers 12
- Unshrouded vertical headers 8, 10
- Unshrouded right angle headers 14

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]

TYPICAL APPLICATIONS



PV™ Crimp-to-Wire Contacts

PART NUMBERS



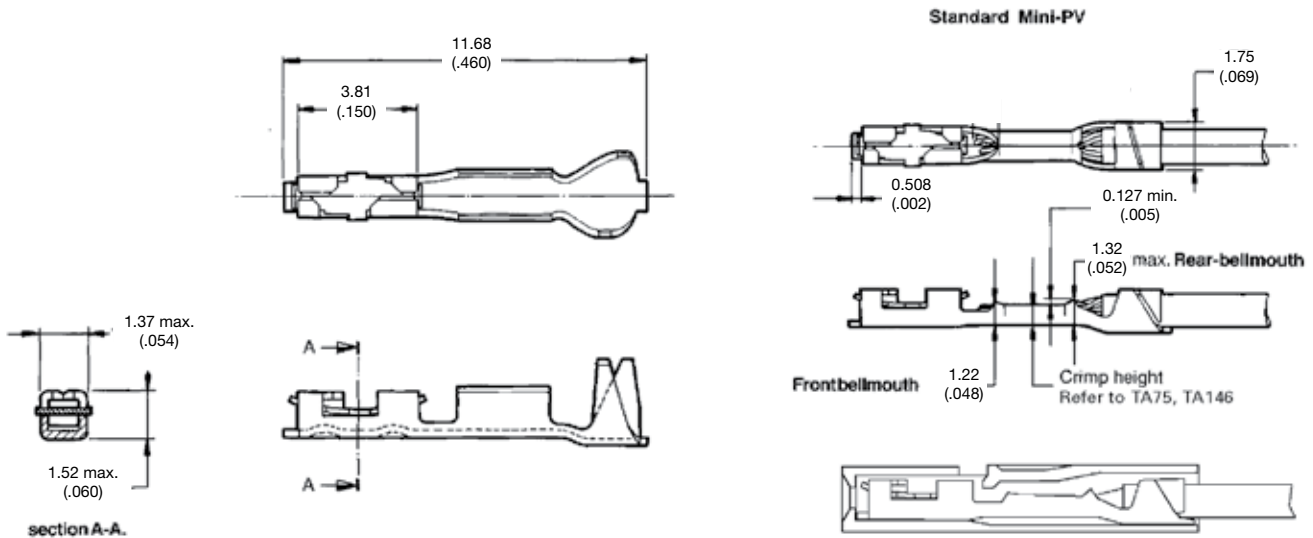
HOW TO SELECT THE RIGHT CONTACT

- Step 1** Select Application
- Step 2** Select Spring Force
- Step 3** Select Wire Size

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 or two 22 or two 24	Standard	48276-002LF
	High	48047-002LF
	Ultra High	47566-002LF
22, 24, 26 or two 26 or two 28	Standard	47457-002LF
	High	47439-002LF
	Ultra High	47565-002LF
28, 30, 32 or two 30 or two 32	Standard	48048-002LF
	High	47437-002LF
	Ultra High	47564-002LF

PRODUCT



Dimension : mm (inch)

FEATURES

- 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: 1×10^5 M Ω 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

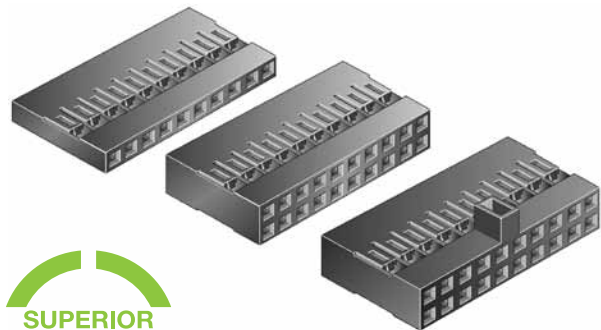
- Compatible with wave soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

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



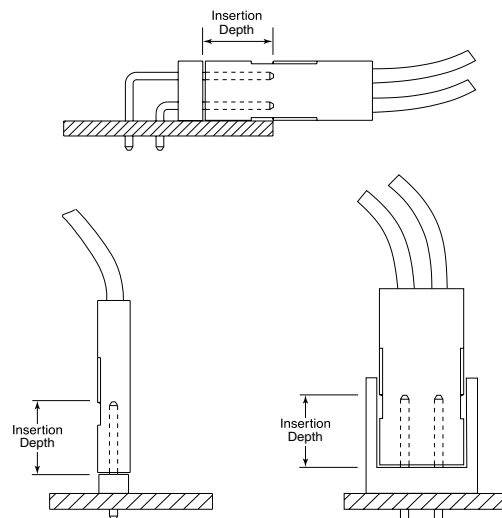
MATING DATA

- | | |
|---------------------------------|-------|
| Continuous unshrouded headers | 12 |
| Unshrouded vertical headers | 8, 10 |
| Unshrouded right angle headers | 14 |
| see previous page for terminals | 36 |

INSERTION DEPTH

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

TYPICAL APPLICATIONS



PV™ Crimp-to-Wire Housing

PART NUMBERS

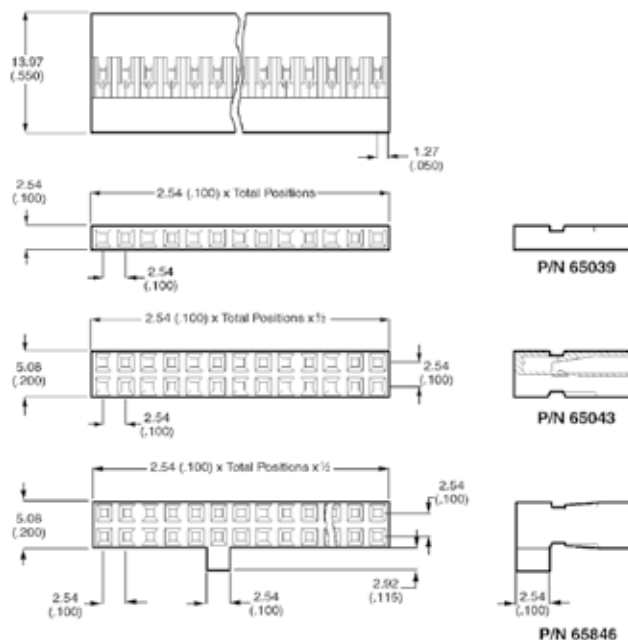


- 65039** = Single Row
- 65043** = Double Row
- 65846** = Double Row with Center Key

Total Positions	Single Row		Total Positions	Double Row	
	65039	78211		65043	65846
2	-035		4	-035	
3	-034	-003	6	-034	
4	-033	-004	8	-033	
5	-032	-005	10	-032	
6	-031	-006	12	-031	-017
7	-030	-007	14	-030	
8	-029	-008	16	-029	
9	-028	-009	18	-028	
10	-027	-010	20	-027	
11	-026	-011	22	-026	-018
12	-025	-012	24	-025	
13	-024	-013	26	-024	-019
14	-023	-014	28	-023	-020
15	-022	-015	30	-022	
16	-021		32	-021	-021
17	-020		34	-020	-022
18	-019		36	-019	-023
			38	-018	

Total Positions	Single Row		Total Positions	Double Row	
	65039	78211		65043	65846
19	-018		40	-017	-024
20	-017		42	-016	-025
21	-016		44	-015	-004
22	-015		46	-014	-026
23	-014		48	-013	-027
24	-013		50	-012	
25	-012		52	-011	-028
26	-011		54	-010	
27	-010		56	-009	-029
28	-009		58	-008	-030
29	-008		60	-007	-013
30	-007		62	-006	-031
31	-006		64	-005	-009
32	-005		66	-004	-032
33	-004		68	-003	-033
34	-003		70	-002	-034
35	-002		72	-001	-035
36	-001				

PRODUCT



Dimension : mm (inch)

FEATURES

- 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: 1×10^5 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

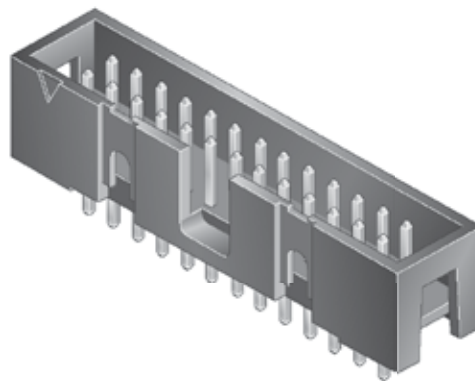
- Compatible with wave soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

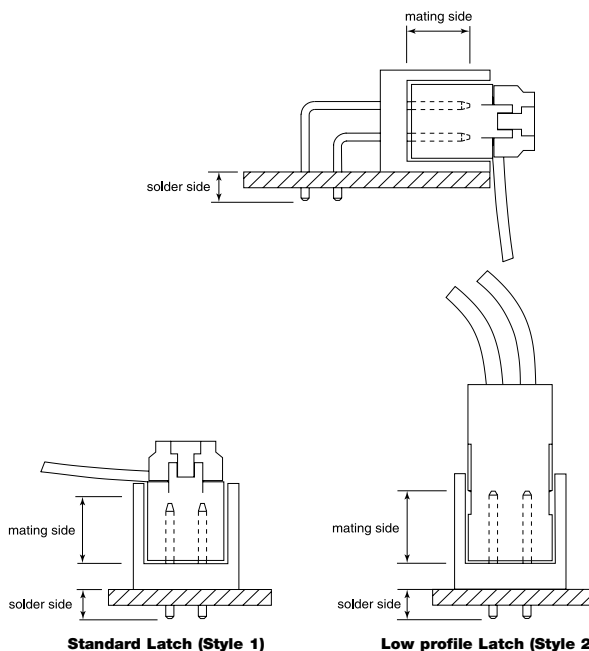
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

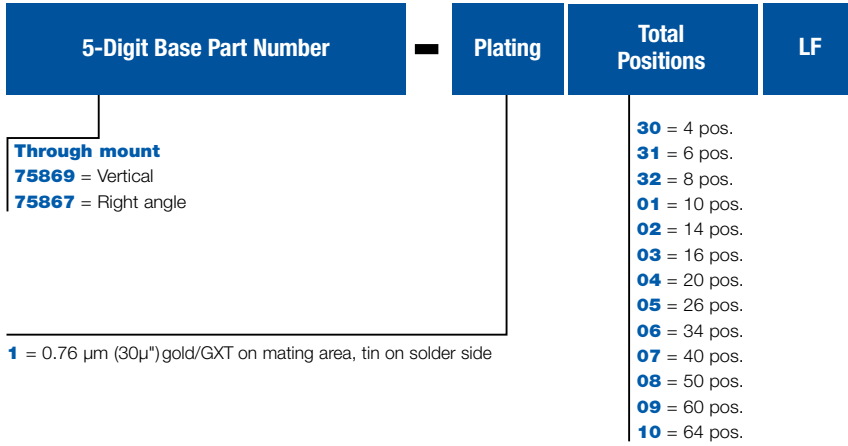
- Quickie™ IDC receptacles 46

TYPICAL APPLICATIONS



Quickie™ Shrouded Headers, Low Profile

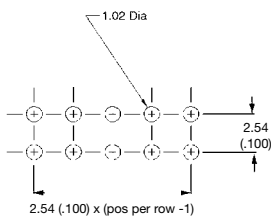
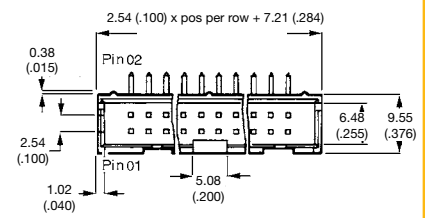
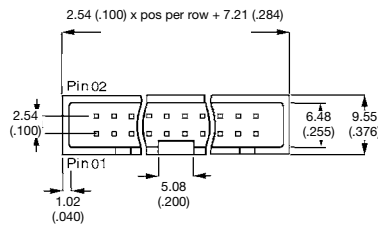
PART NUMBERS



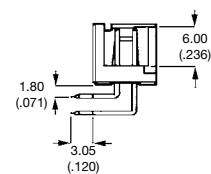
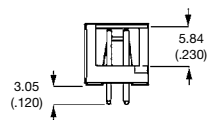
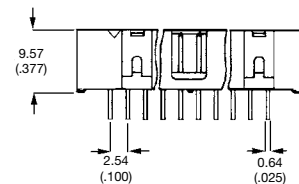
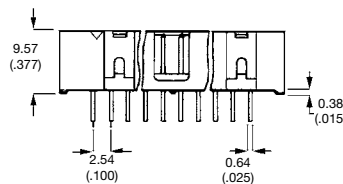
PRODUCT

Vertical

Right Angle



Recommended PCB layouts



Dimension : mm (inch)

2.54 mm (.100")

FEATURES

- 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 10⁵ MΩ 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

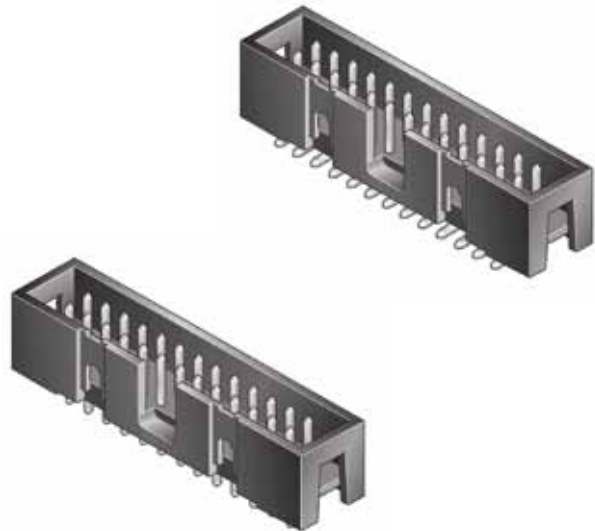
- Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

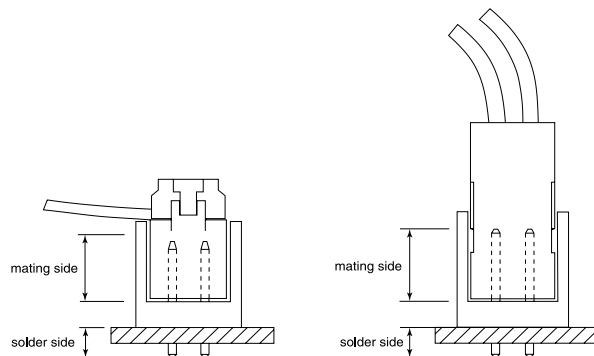
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- Quickie™ IDC receptacles 46

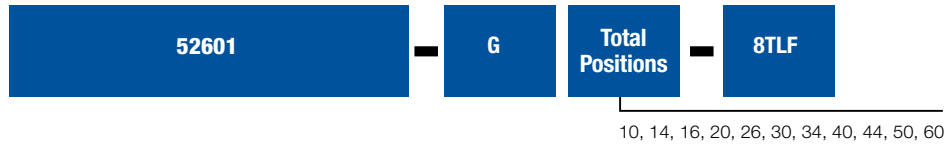
TYPICAL APPLICATIONS



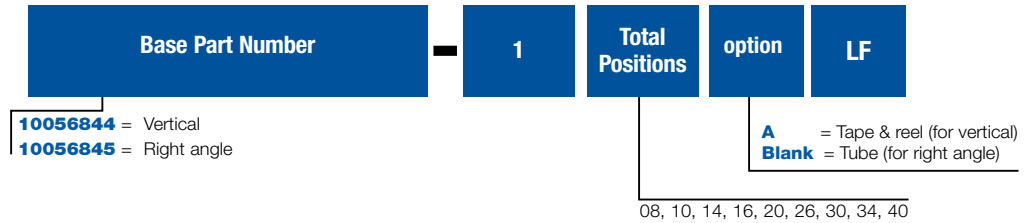
Quickie™ Shrouded Headers, Low Profile, SMT, Pin-in-Paste

PART NUMBERS

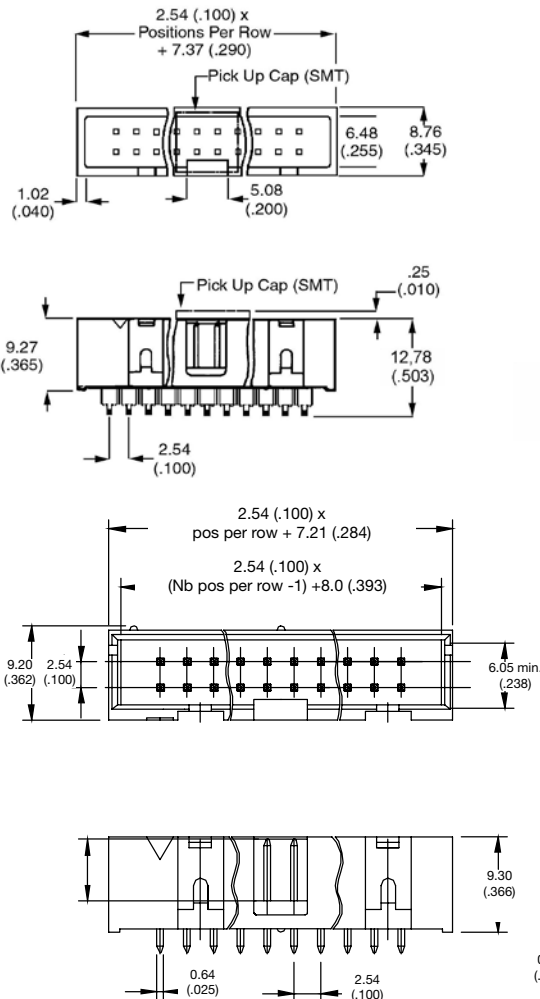
SMT (Surface Mount)



PiP (Pin-in-Paste)

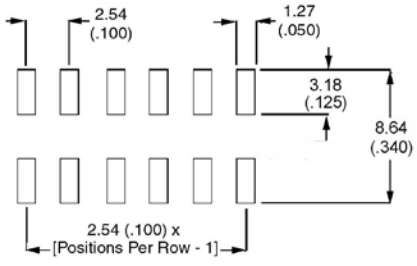


PRODUCT

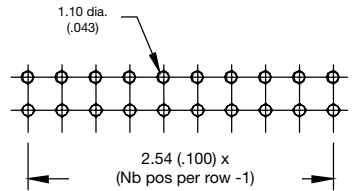


52601

10056844



Recommended PCB layouts



Recommended PCB layouts

Dimension : mm (inch)

FEATURES

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

TECHNICAL DATA

PHYSICAL

- ▶ Housing: Glass filled, high temperature thermoplastic polyester, grey
- ▶ 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: 1×10^5 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

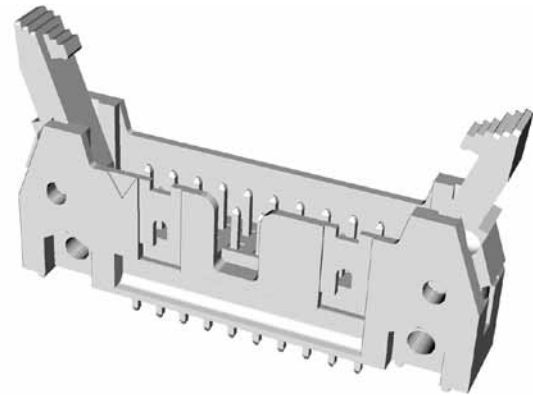
- ▶ Compatible with wave soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

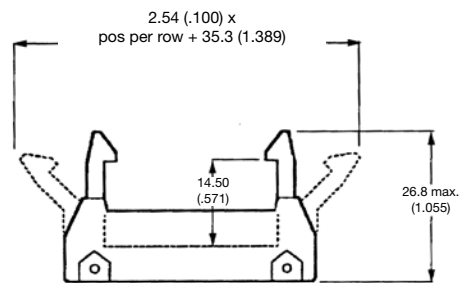
- ▶ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



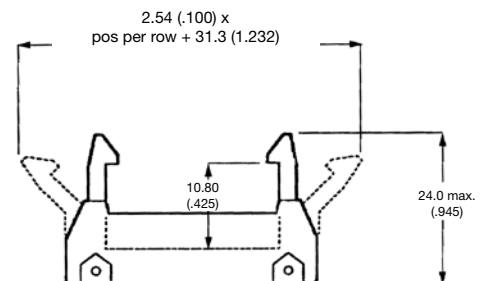
MATING DATA

- ▶ Quickie™ IDC receptacles 46

TYPICAL APPLICATIONS



Standard Latch (Style 1)



Low profile Latch (Style 2)

Quickie™ Shrouded Headers, Eject Latch

PART NUMBERS



Through mount

71918 = Vertical

71922 = Right angle

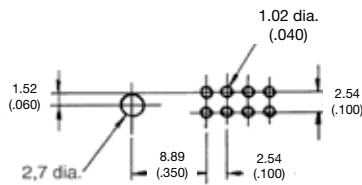
Plating = 0.76 μm (30μ") gold/GXT on mating area, tin on solder side

- 1** = Standard (mates with IDC Receptacle with Strain Relief)
- 2** = Low Profile (mates with IDC Receptacle without Strain Relief)

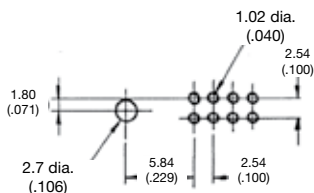
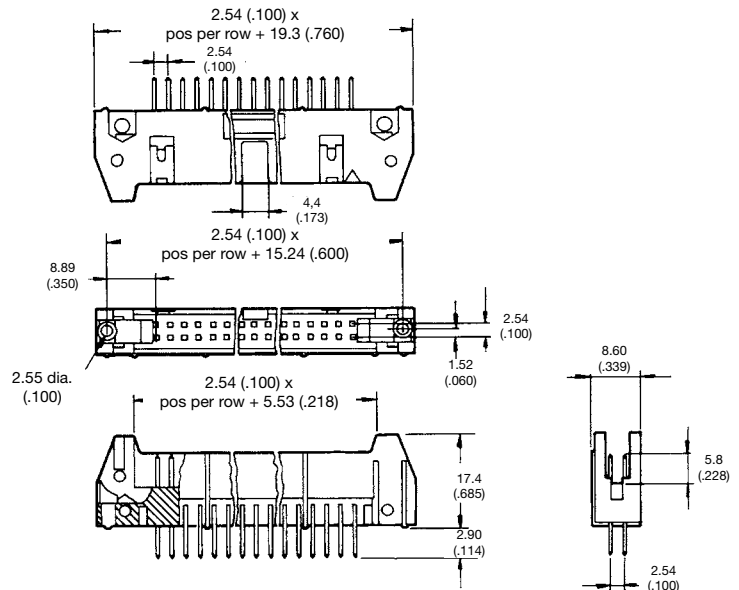
06, 08, 10, 14, 16, 18, 20, 26, 30, 34, 40, 44, 50, 60, 64

71918	-	1XXLF	
71922	-	1XXLF	
XX = 06, 08, 10, 16, 20			

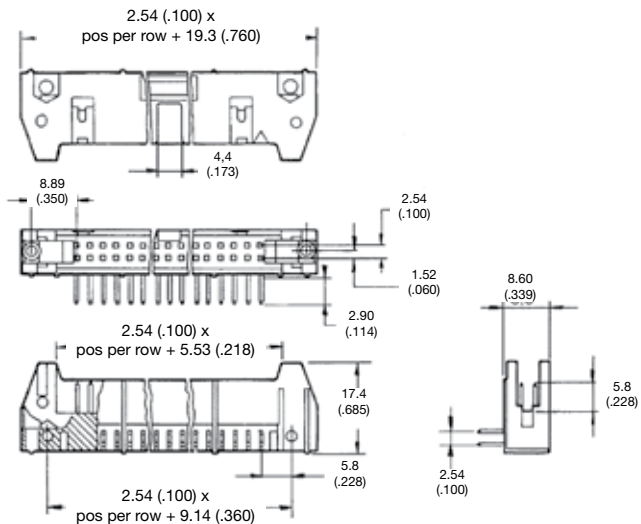
PRODUCT



Vertical



Right Angle



Recommended PCB layouts

Dimension : mm (inch)

TECHNICAL DATA

PHYSICAL

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

ELECTRICAL PERFORMANCE

- Current rating: 1 A continuous
- Insulation resistance: 1x 10⁵ MΩ min.
- Contact resistance: 15 mΩ 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

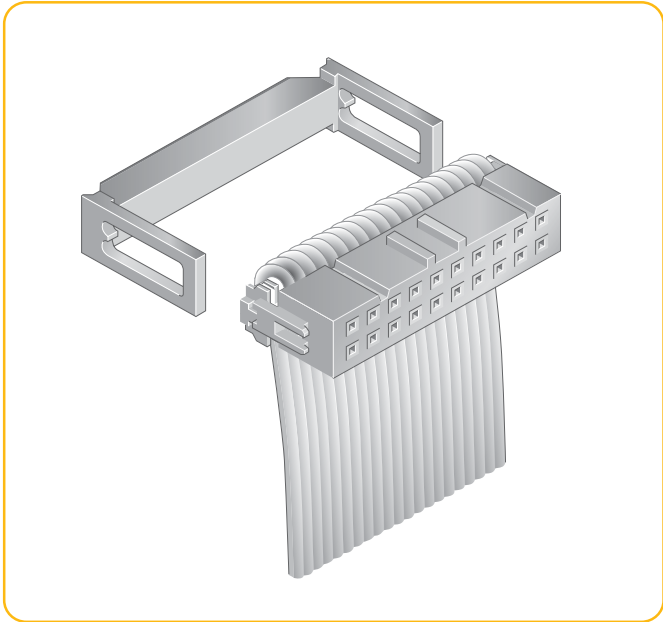
- Compatible with wave soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

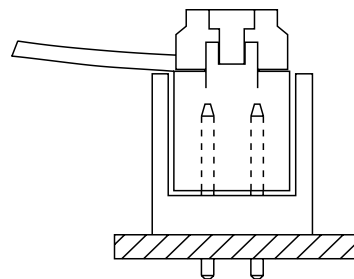
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- BergStik® unshrouded vertical headers 8, 12
- Quickie® shrouded low profile headers 40, 42
- Quickie® shrouded eject latch headers 44

TYPICAL APPLICATIONS

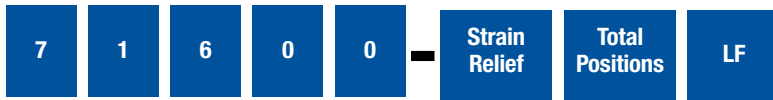


Low profile Latch (Style 2)

Quickie™ IDC Receptacle

2.54 mm (.100")

PART NUMBERS



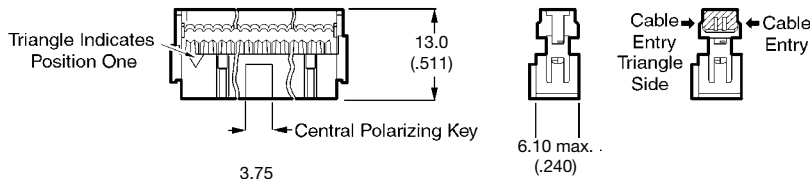
Note: 4 position available without strain relief only

04, 06, 08, 10, 14, 16, 20, 26, 34, 40, 50, 60, 64

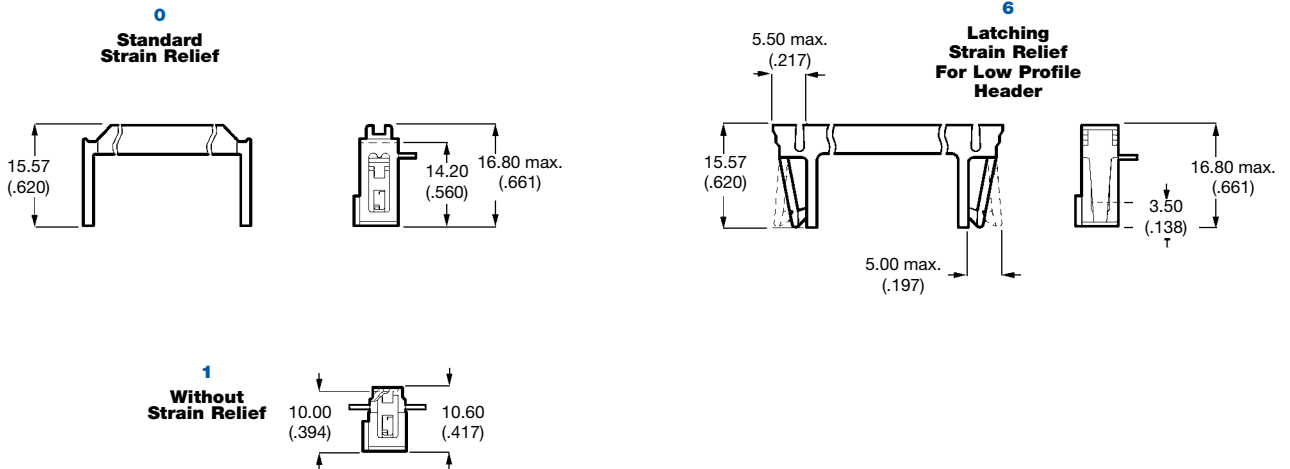
- 0** = Standard (Mates with Shrouded Eject Latch Header Latch 1)
- 1** = None (Mates with Shrouded Eject Latch Header Latch 2)
- 6** = Latching (Mates with Low Profile Headers)

71600 - 0XXLF **CORE RANGE**
 XX = 04, 06, 08, 10, 16, 20

PRODUCT



Cable specification:
 Wire size: AWG 28 stranded
 AWG 30 solid
 Pitch: 1.27 mm (.050")



Dimension : mm (inch)

FEATURES

- Ideal 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: $1 \times 10^5 \text{ M}\Omega$ 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

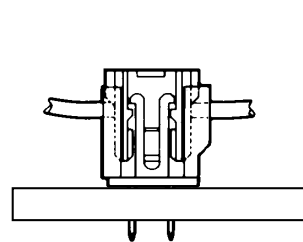
-  File no. E66906
-  File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: BUS-12-095

RoHs INFORMATION

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



TYPICAL APPLICATIONS



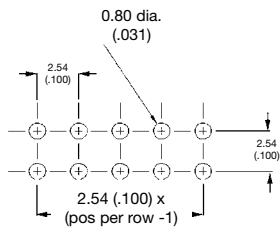
Quickie™ IDC PCB Connector

PART NUMBERS

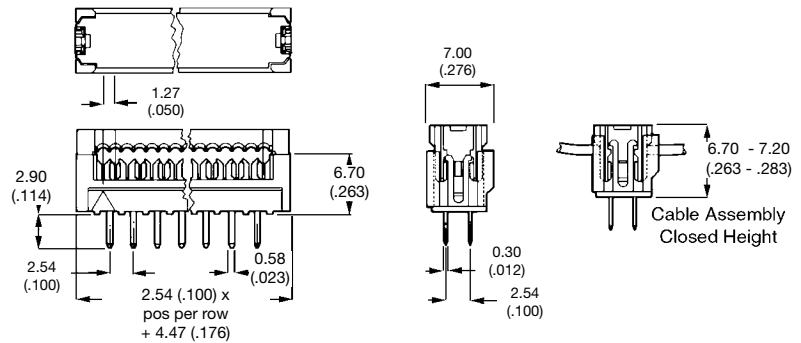


- | | | |
|---------------------|---------------------|---------------------|
| 06 = 6 pos. | 18 = 18 pos. | 34 = 34 pos. |
| 08 = 8 pos. | 20 = 20 pos. | 40 = 40 pos. |
| 10 = 10 pos. | 24 = 24 pos. | 50 = 50 pos. |
| 14 = 14 pos. | 26 = 26 pos. | 60 = 60 pos. |
| 16 = 16 pos. | 30 = 30 pos. | 64 = 64 pos. |

PRODUCT



Recommended PCB layouts



Dimension : mm (inch)

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 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

- -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

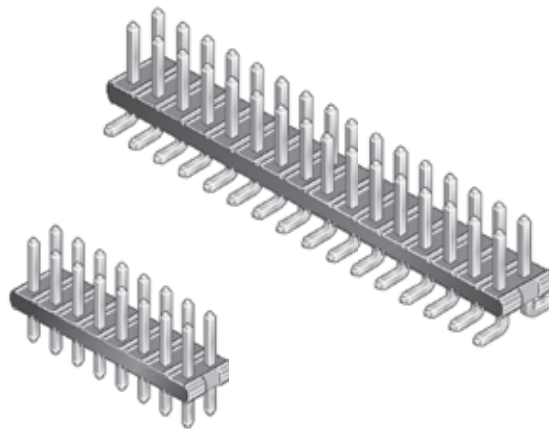
- Compatible with wave, vapor-phase, and IR reflow soldering processes

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

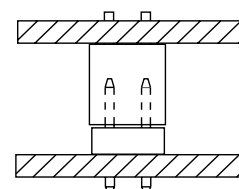
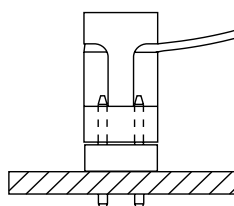
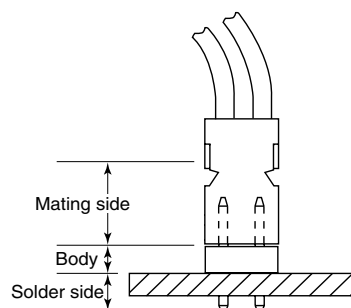
- This product is RoHS compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Minitek™ ctw contacts and housings	70
■ Minitek™ Vertical receptacles	58
■ Minitek™ Shunts	60
■ Minitek™ IDC receptacles	74

TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ Unshrouded Vertical Headers

PART NUMBERS



1 = Through Mount (TMT)
2 = Surface Mount (SMT)

G = 0,76 μm (30μ") gold/GXT on mating area,
 2-6 μm (79-237μ") Tin on solder side
F = Gold flash on mating area,
 2-6 μm (79-237μ") Tin on solder side

02 to 25 (TMT)
02 to 25 (SMT)

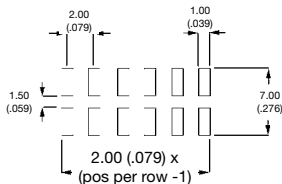
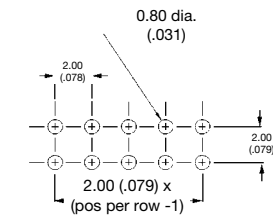
U = Tube without cap (TMT)
A = Tape-and-reel with cap (SMT)

57202 - G 52 - XXALF **CORE RANGE**
 XX = 02, 03, 04, 05, 06, 08, 10

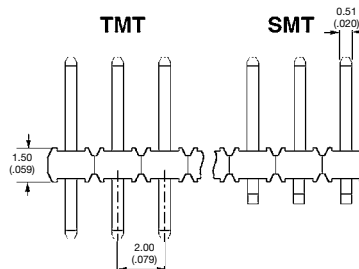
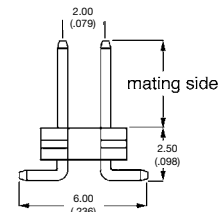
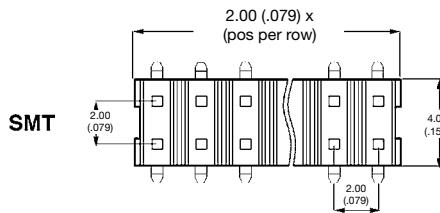
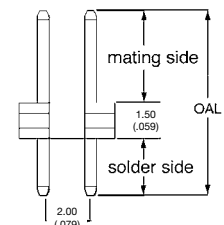
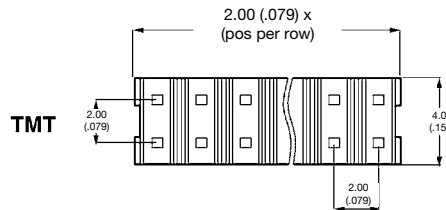
Surface Mount			Through Mount			
Pin Style	Mating side		Pin Style	Mating Side	Solder Side	OAL
51	2.00	(.079)	06	4.00 (.157)	2.50 (.098)	8.00 (.315)
52	4.00	(.157)	08	4.00 (.157)	3.00 (.118)	8.50 (.335)

2.00 mm (.079")

PRODUCT



Recommended PCB layouts



Dimension : mm (inch)

FEATURES

- 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: 1×10^5 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 to 06 pos. packed in box)

PROCESSING INFORMATION

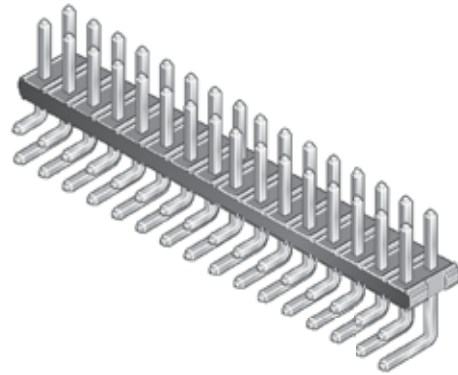
- Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

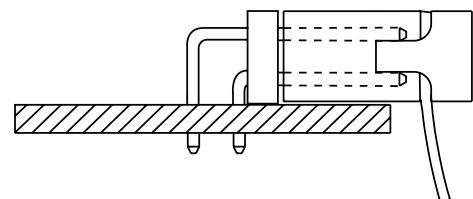
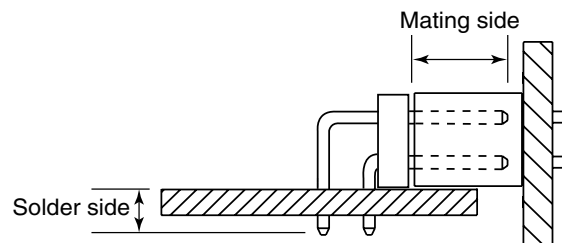
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

■ Minitek™ ctw contacts and housings	70
■ Minitek™ Vertical receptacles	58
■ Minitek™ Shunts	60
■ Minitek™ IDC receptacles	74

TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ Unshrouded Right Angle Headers

PART NUMBERS

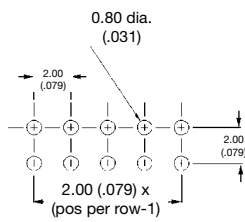


G = 0,76 µm (30µ")gold/GXT on mating area,
2-6 µm (79-237µ") Tin on solder side
F = Gold flash on mating area,
2-6 µm (79-237µ") Tin on solder side

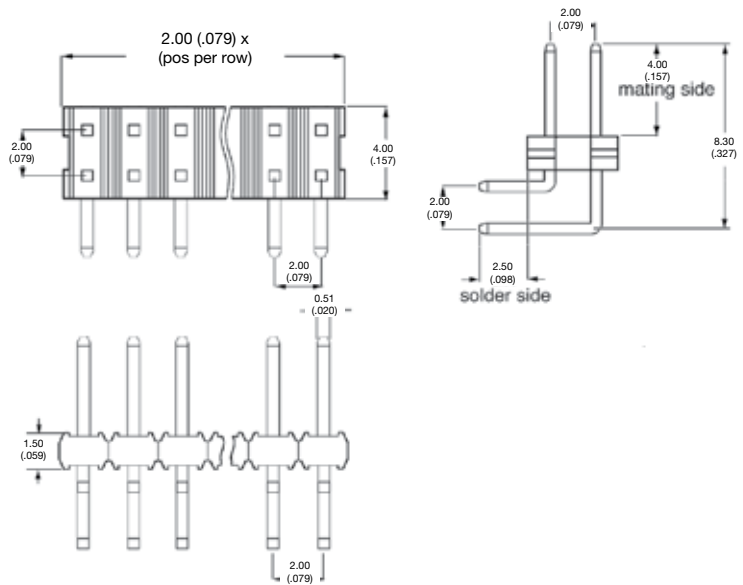
02 to 25

2.00 mm (.079")

PRODUCT



Recommended PCB layouts



Dimension : mm (inch)

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 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

- -55°C to +125°C

PACKAGING

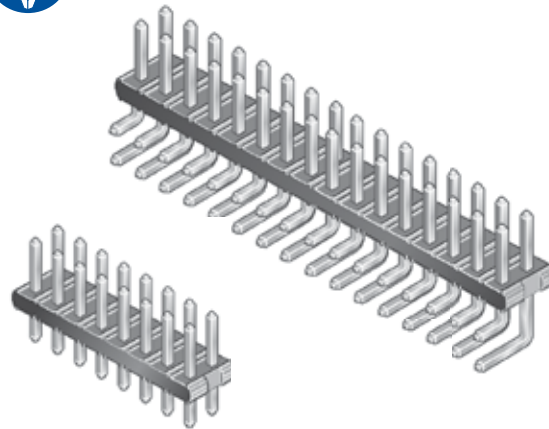
- Tubes (04 to 06 pos. packed in box)
- Tape on reel with pick up cap

PROCESSING INFORMATION

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

REFERENCE INFORMATION

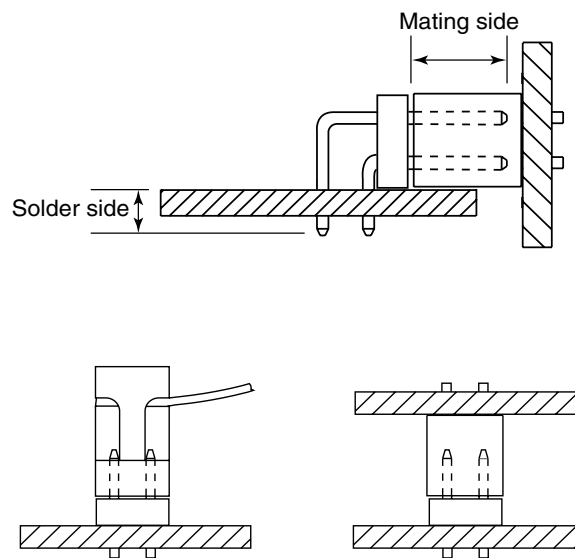
- File no. E66906
- File no. LR46923
- Product drawing: by 8-digit base part number
- Product specification: DPS-12-011 and GS-12-163
- Application specification: TA-895
- Reflow profile: TA-842



MATING DATA

■ Minitek™ ctw contacts and housings	70
■ Minitek™ Vertical receptacles	58
■ Minitek™ Shunts	60
■ Minitek™ IDC receptacles	74

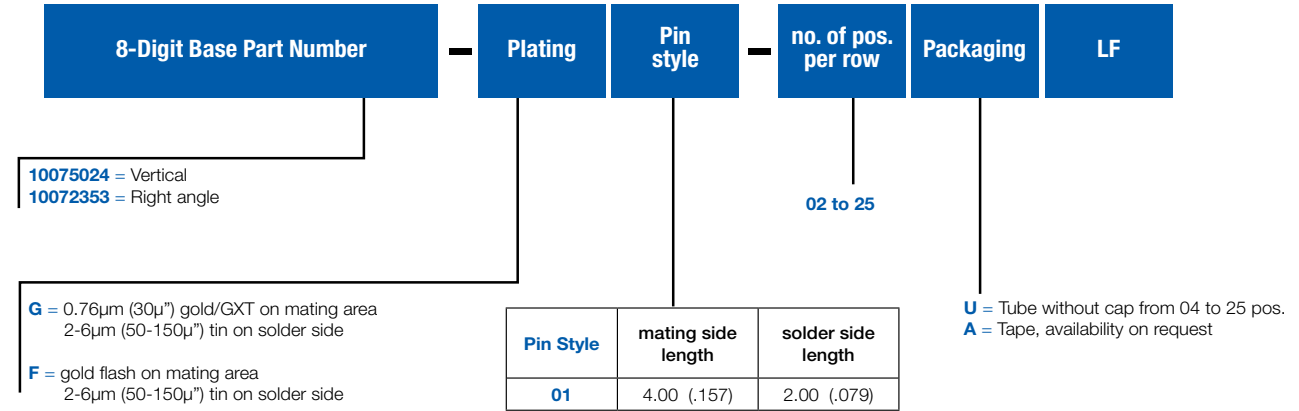
TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ Unshrouded Headers, Pin-in-Paste

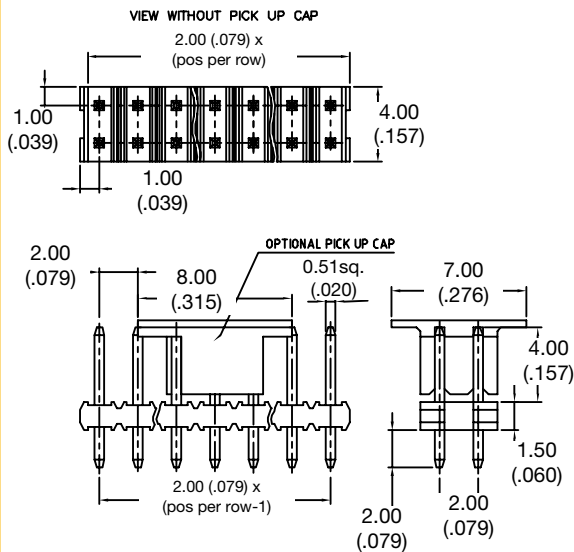
PART NUMBERS



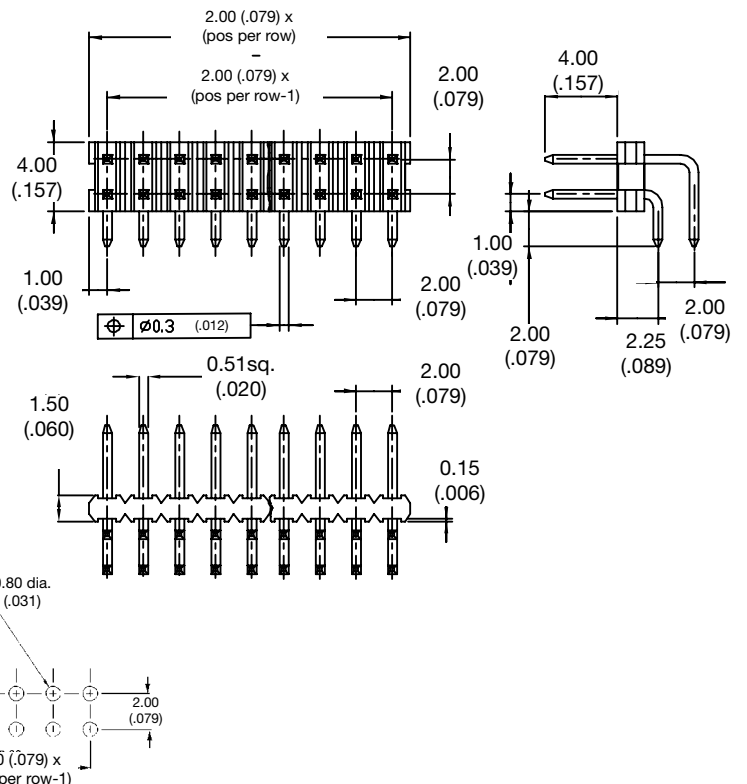
2.00 mm (.079")

PRODUCT

10075024 Vertical



10072353 Right angle



Dimension : mm (inch)

Recommended PCB layouts

FEATURES

- 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/GXT over over 1.27 μm (50μ") 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

- 55°C to +125°C

PACKAGING

- Standard: in bags

PROCESSING INFORMATION

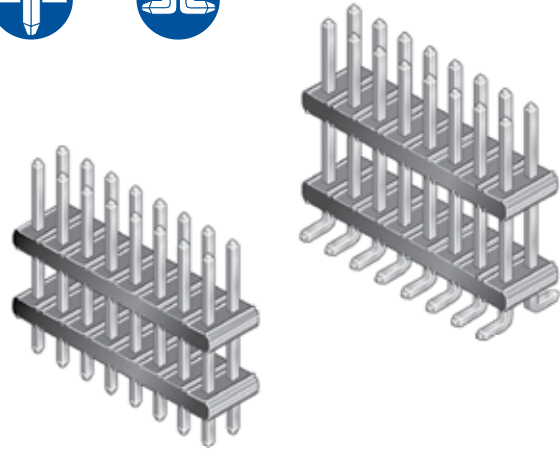
- Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

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

RoHS INFORMATION

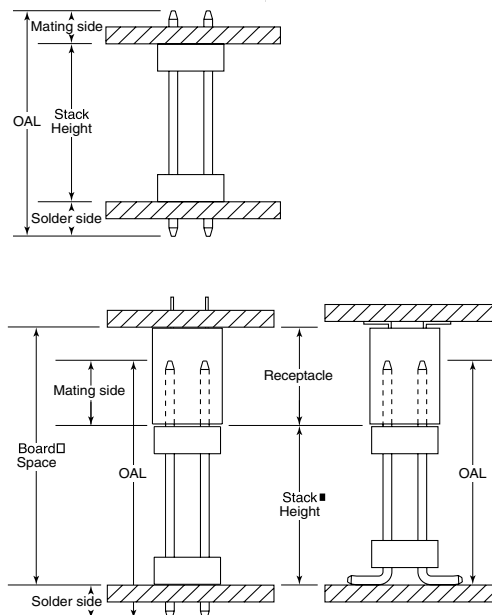
- This product is RoHS compatible according to the European Union Directive 2002/95/IEC



MATING DATA

Minitek™ ctw contacts and housings	70
Minitek™ Vertical receptacles	58
Minitek™ Shunts	60
Minitek™ IDC receptacles	74

TYPICAL APPLICATIONS



Minitek™ Unshrouded Stacking Headers

PART NUMBERS

Compile your own part number using custom dimensions (Please allow for initial setup on our system)



1 = Through Mount (TMT)
2 = Surface Mount (SMT)

1 = 2.50
3 = 3.00
0 = SMT

T = 0,76 µm (30µ")
 gold/GXT on mating side,
 tin on solder side

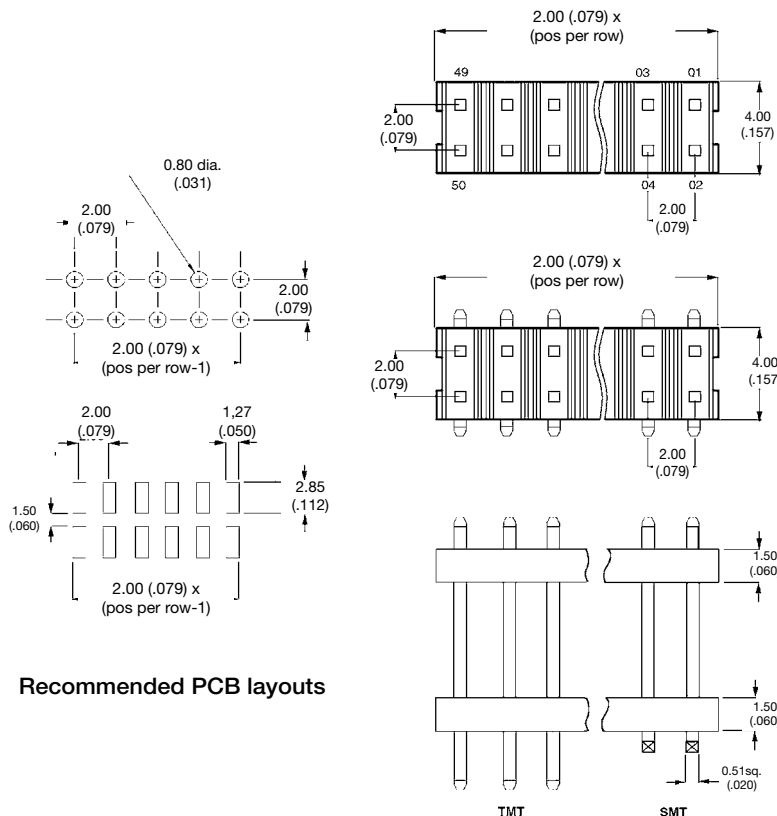
02 to 25 (TMT)
02 to 25 (SMT)

xxx = mm
 Specify mm
 [e.g., 037 = 03.7 mm]
 in 0.1 mm increments

Pin Style	Overall length (OAL)	
	(TMT)	(SMT)
22	8.20 (.323)	6.53 (.257)
24	9.55 (.376)	7.87 (.310)
26	10.19 (.401)	8.51 (.335)
28	11.79 (.464)	10.11 (.398)
30	13.54 (.533)	11.86 (.467)
32	14.10 (.555)	12.42 (.489)
34	15.60 (.614)	13.92 (.548)
36	17.09 (.673)	15.42 (.607)
38	19.08 (.751)	17.40 (.685)
40	21.08 (.830)	19.41 (.764)

2.00 mm (.079")

PRODUCT



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

Dimension : mm (inch)

FEATURES

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

TECHNICAL DATA

PHYSICAL

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



ELECTRICAL PERFORMANCE

- Current rating: 2 A continuous
- Insulation resistance: $1 \times 10^5 \text{ M}\Omega$ min.
- Contact resistance: 20 mΩ
25 mΩ - 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

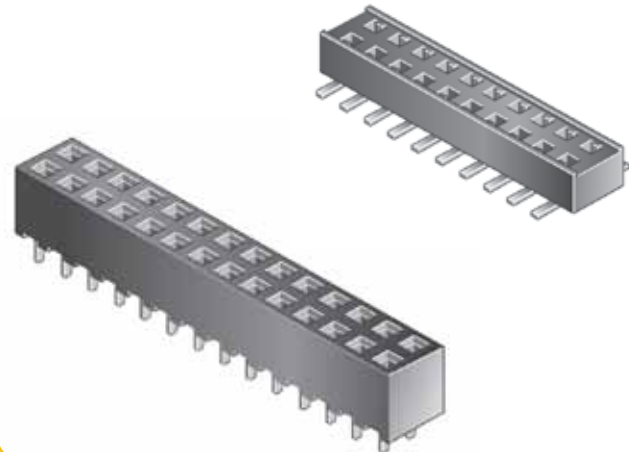
- Compatible with wave, vapor-phase, and IR reflow soldering processes

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



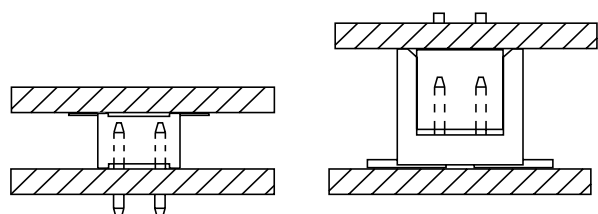
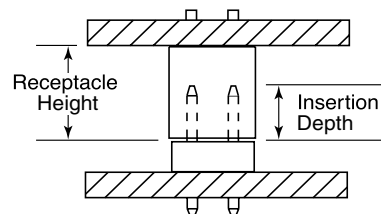
MATING DATA

- Minitek™ Unshrouded headers: 50, 52, 56
- Minitek™ Shrouded headers: 62, 64

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

TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ Vertical Receptacles

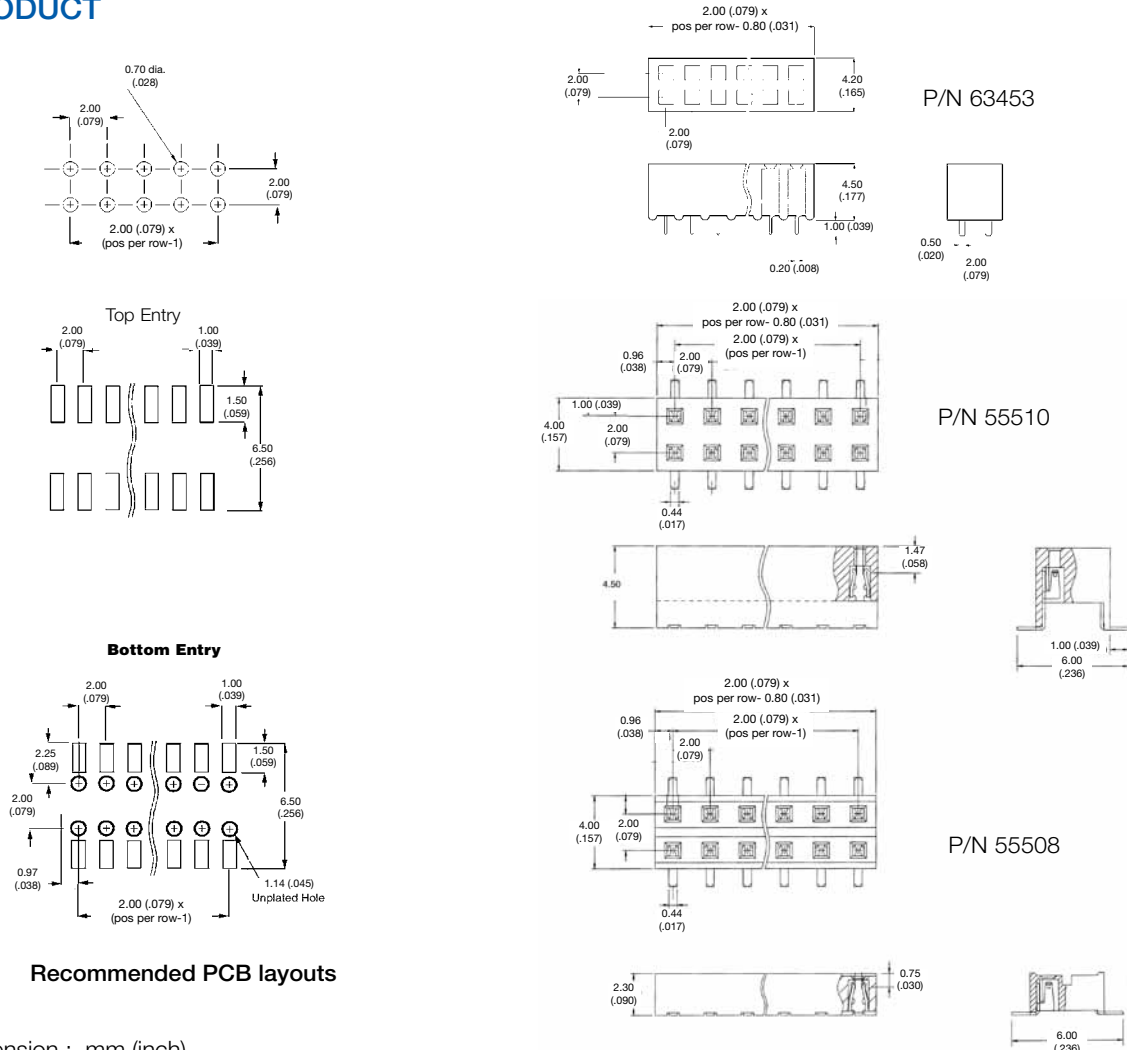
PART NUMBERS

5-Digit Base Part Number			1	Total Positions	Packaging	LF											
<table border="1"> <thead> <tr> <th colspan="3">Through Mount (TMT)</th> </tr> <tr> <th>Height</th> <th></th> <th>Entry</th> </tr> </thead> <tbody> <tr> <td>63453</td> <td>4.50 (.177)</td> <td>Top</td> </tr> </tbody> </table>			Through Mount (TMT)			Height		Entry	63453	4.50 (.177)	Top	<p>04 to 50 Top Entry 04 to 30 Bottom Entry</p>			<p>- (dash) = Tubes (TMT) TR = Tape-and-reel (SMT)</p>		
Through Mount (TMT)																	
Height		Entry															
63453	4.50 (.177)	Top															
<table border="1"> <thead> <tr> <th colspan="3">Surface Mount (SMT)</th> </tr> <tr> <th>Height</th> <th></th> <th>Entry</th> </tr> </thead> <tbody> <tr> <td>55510</td> <td>4.50 (.177)</td> <td>Top</td> </tr> <tr> <td>55508</td> <td>2.30 (.090)</td> <td>Top</td> </tr> <tr> <td>91596</td> <td>2.30 (.090)</td> <td>Bottom</td> </tr> </tbody> </table>			Surface Mount (SMT)			Height		Entry	55510	4.50 (.177)	Top	55508	2.30 (.090)	Top	91596	2.30 (.090)	Bottom
Surface Mount (SMT)																	
Height		Entry															
55510	4.50 (.177)	Top															
55508	2.30 (.090)	Top															
91596	2.30 (.090)	Bottom															
			<p>1 = 0,76 μm (30μ") gold/GXT on mating area, 2-6 μm (79-237μ") Tin on solder side</p>														

55510 - 1XXTRLF **CORE RANGE**
XX = 04, 06, 08, 10, 12, 16, 20

2.00 mm (.079")

PRODUCT



FEATURES

- 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/GXT or tin-lead over 1.27 µm (50 µ") nickel

ELECTRICAL PERFORMANCE

- Current rating: 1 A continuous
- Insulation resistance: 1×10^5 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

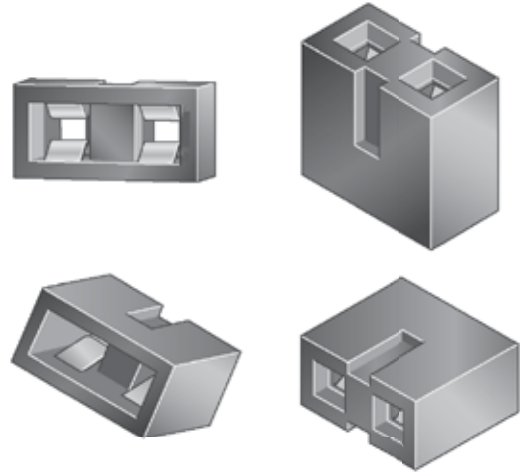
- Compatible with wave, vapor-phase, and IR reflow soldering processes

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



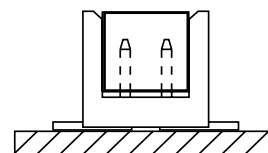
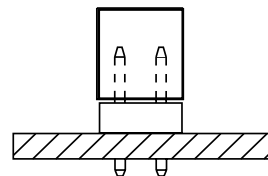
MATING DATA

- Minitek™ Unshrouded headers: 50, 52, 56
- Minitek™ Shrouded headers: 62, 64

INSERTION DEPTH

- 2.24 mm min. [provides .381 mm wipe]

TYPICAL APPLICATIONS

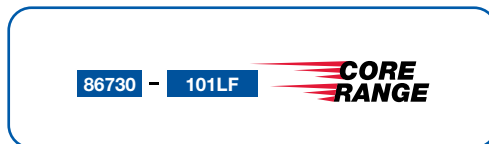


Minitek™ Shunts

PART NUMBERS

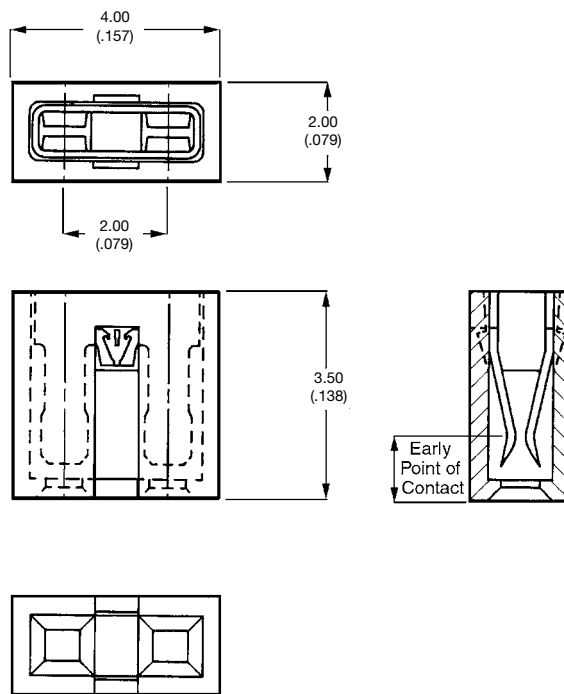


1 = 0,76 μm (30μ") gold/GXT on mating area,
2-6 μm (79-237μ") Tin on solder side
0 = Gold flash



2.00 mm (.079")

PRODUCT



Dimension : mm (inch)

FEATURES

- 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: 1 x 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

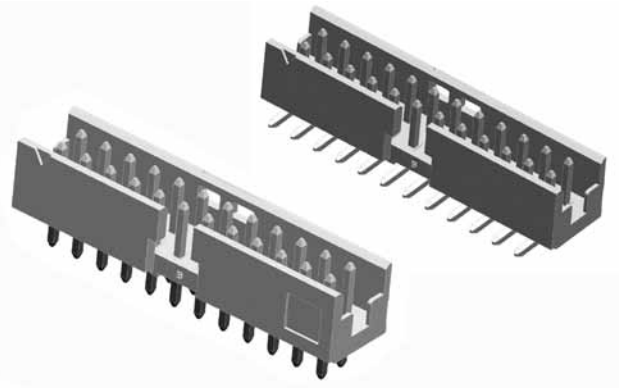
- Compatible with wave, vapor-phase, and IR reflow soldering processes

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

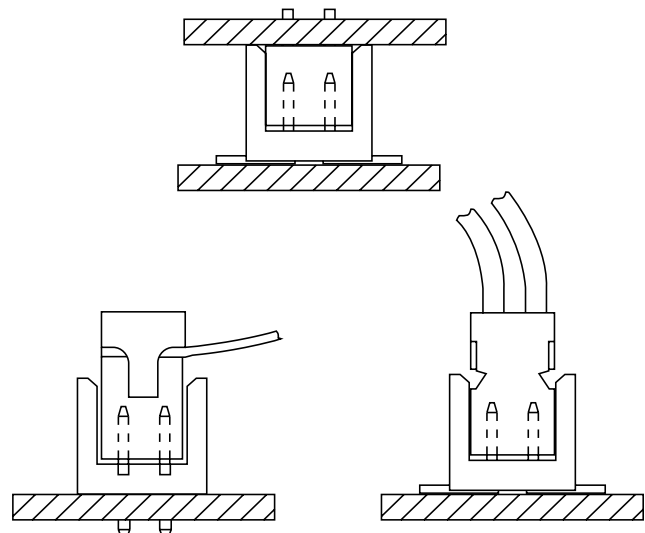
- This product is RoHS compatible according to the European Union Directive 2002/95/IEC



MATING DATA

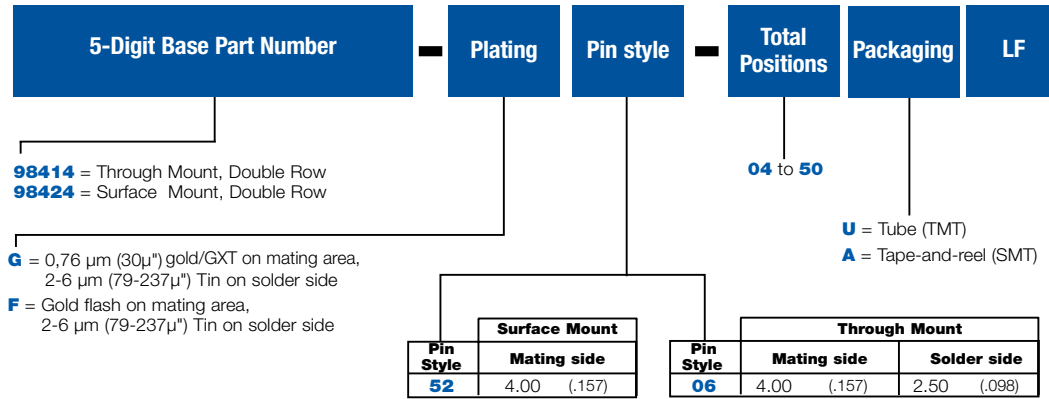
▶ Minitek™ ctw contacts and housings	70
▶ Minitek™ Vertical receptacles	58
▶ Minitek™ Shunts	60
▶ Minitek™ IDC receptacles	74
▶ Minitek™ Active latch	72

TYPICAL APPLICATIONS



Minitek™ Shrouded Vertical Headers

PART NUMBERS

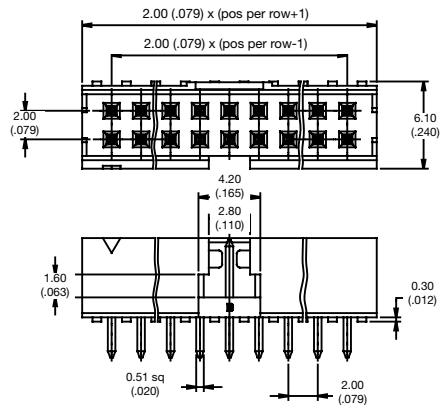
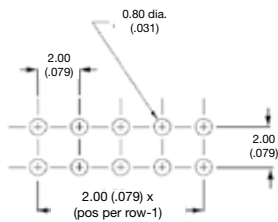


98424 - G 52 - XX ALF

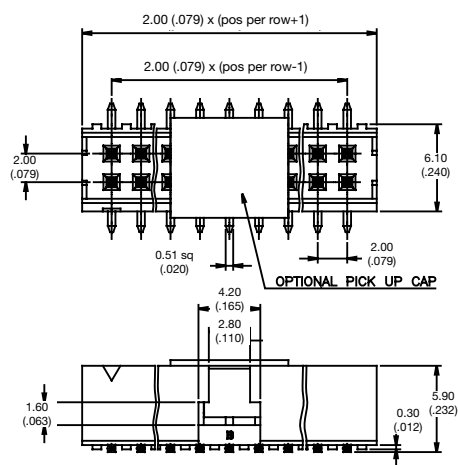
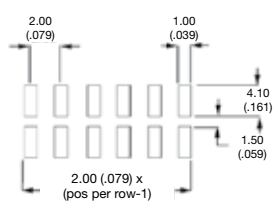
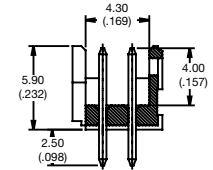
XX = 04, 06, 08, 10, 12, 16, 20

2.00 mm (.079")

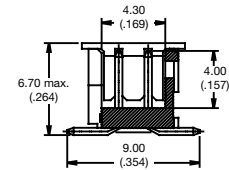
PRODUCT



98414 Through mount



98424 Surface mount



Recommended PCB layouts

Dimension : mm (inch)

FEATURES

- 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: 1 x 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: Tubes (04 pos. packed in box)

PROCESSING INFORMATION

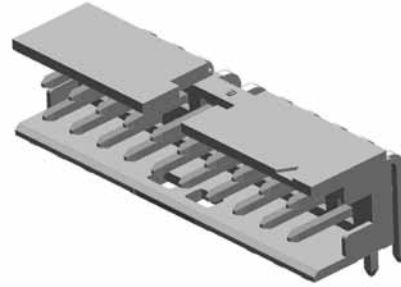
- Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

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

RoHs INFORMATION

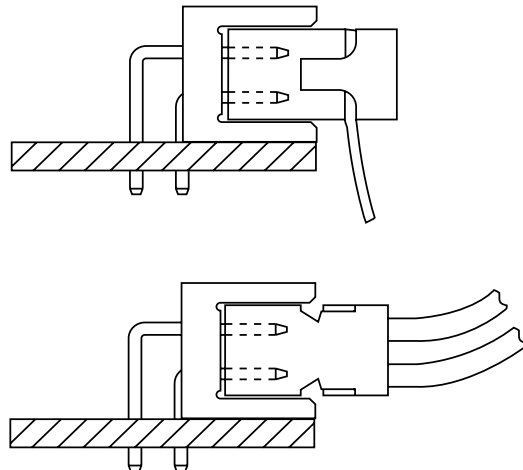
- This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

▶ Minitek™ ctw contacts and housings	70
▶ Minitek™ Vertical receptacles	58
▶ Minitek™ Shunts	60
▶ Minitek™ IDC receptacles	74
▶ Minitek™ Active latch	72

TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ Shrouded Right Angle Headers

PART NUMBERS

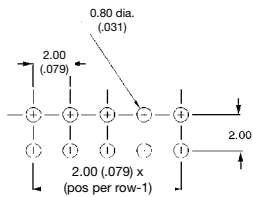


04 to 50 (Double Row)

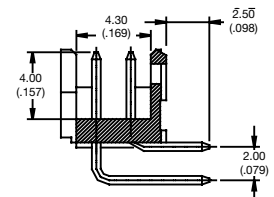
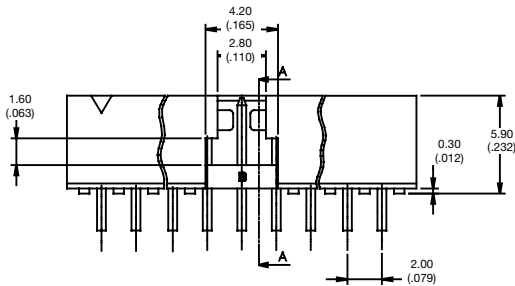
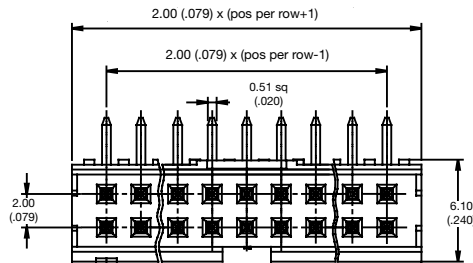
G = 0,76 μm (30μ") gold/GXT on mating area,
2-6 μm (79-237μ") Tin on solder side
F = Gold flash on mating area,
2-6 μm (79-237μ") Tin on solder side

2.00 mm (.079")

PRODUCT



Recommended PCB layouts



Dimension : mm (inch)

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: 1×10^5 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

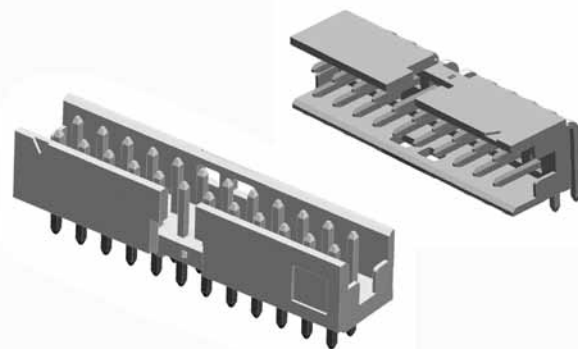
- Tubes (04 pos. packed in box)
- Tape on reel with pick up cap

PROCESSING INFORMATION

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

REFERENCE INFORMATION

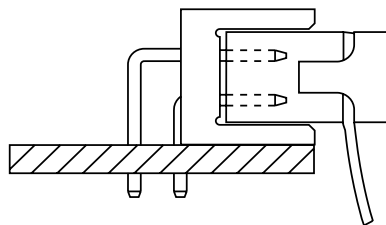
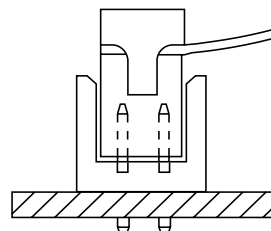
- File no. E66906
- File no. LR46923
- Product drawing: by 8-digit base part number
- Product specification: DPS-12-011 and GS-12-163
- Application specification: TA-895
- Reflow prprofile: TA-842



MATING DATA

■ Minitek™ ctw contacts and housings	70
■ Minitek™ Vertical receptacles	58
■ Minitek™ Shunts	60
■ Minitek™ IDC receptacles	74
■ Minitek™ Active latch	72

TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ Shrouded Headers, Pin-in-Paste

PART NUMBERS



10075025 = Vertical
10072354 = Right angle

04 to 50

G = 0.76µm (30µ") gold/GXT on mating area
2-6µm (50-150µ") tin on solder side

F = gold flash on mating area
2-6µm (50-150µ") tin on solder side

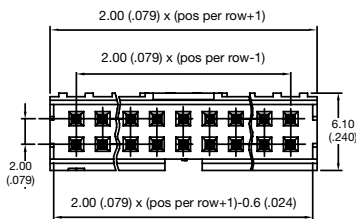
Pin Style	mating side length	solder side length
01	4.00 (.157)	2.00 (.079)

U = Tube without cap from 04 to 25 pos.
A = Tape, availability on request

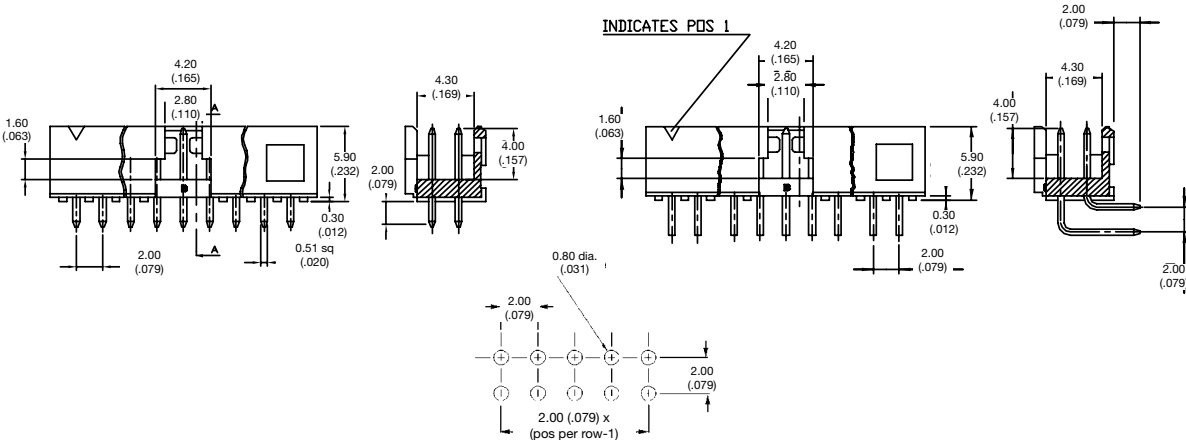
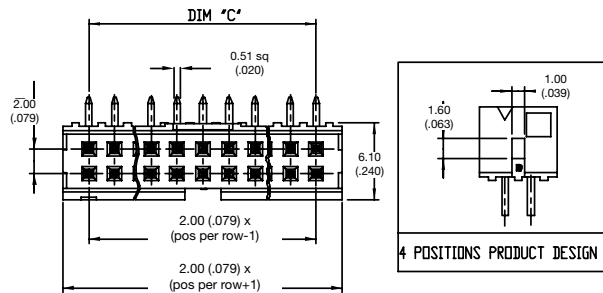
2.00 mm (.079")

PRODUCT

10075025 Vertical



10072354 Right angle



Dimension : mm (inch)

Recommended PCB layouts

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: 1 x 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

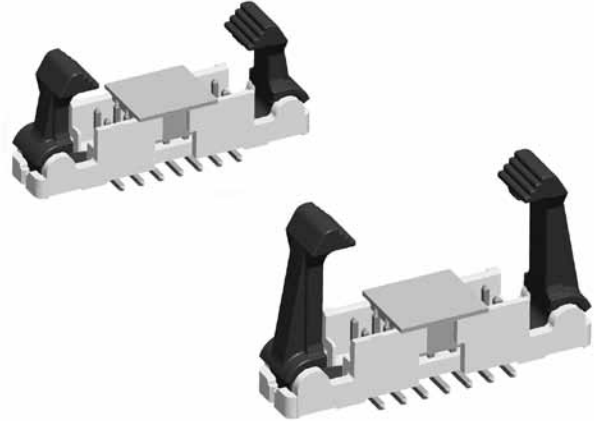
- Compatible with wave, vapor-phase, and IR reflow soldering processes

REFERENCE INFORMATION

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

RoHS INFORMATION

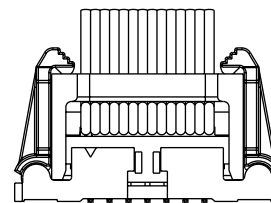
- This product is RoHS compatible according to the European Union Directive 2002/95/IEC



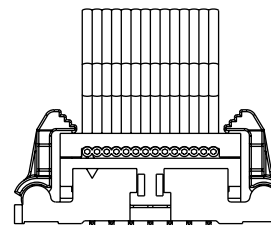
MATING DATA

- Minitek™ IDC receptacles 74

TYPICAL APPLICATIONS



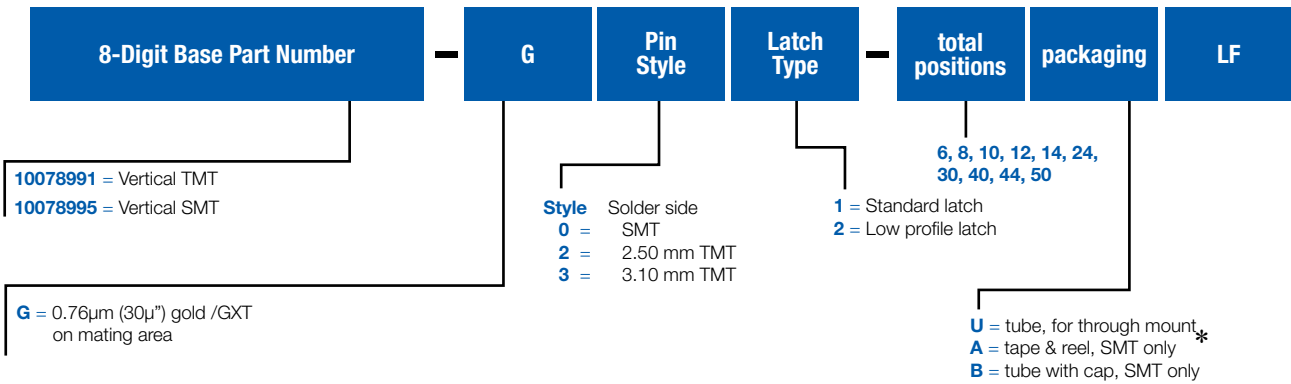
with strain relief
standard latch



without strain relief
low profile latch

Minitek™ Shrouded Eject Latch Headers

PART NUMBERS



10078991	- G	22	- XX	U	LF
10078995	- G	02	- XX	U	LF

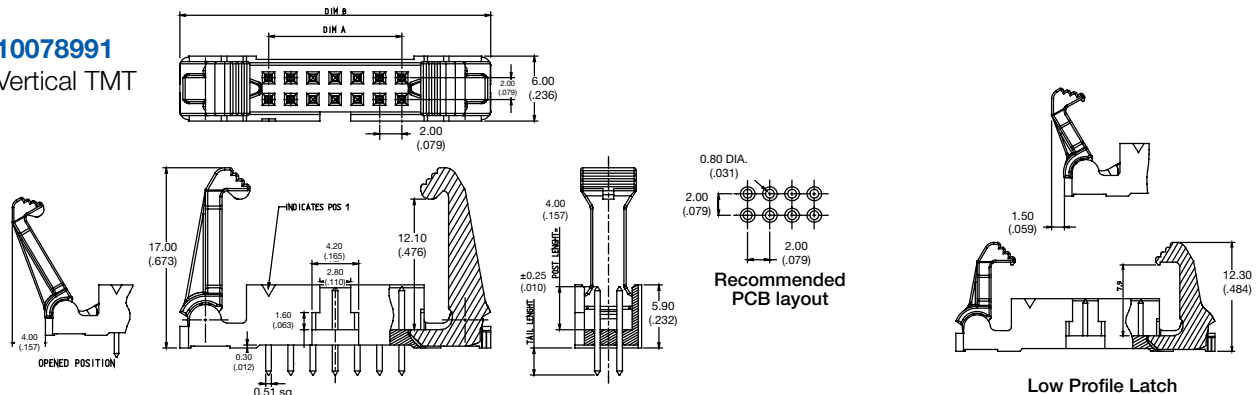
XX = 06, 08, 10, 12, **CORE RANGE**

*as available

2.00 mm (.079")

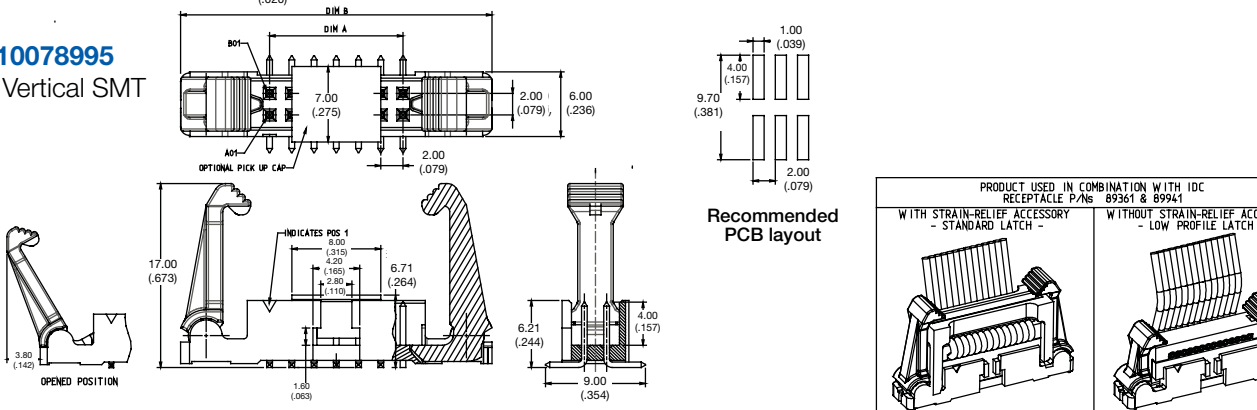
PRODUCT

10078991
Vertical TMT

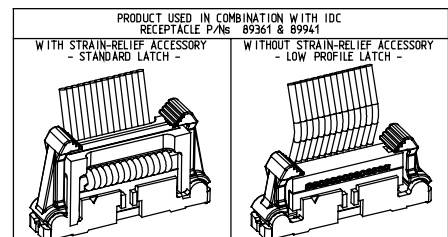


Low Profile Latch

10078995
Vertical SMT



Recommended PCB layout



Dimension : mm (inch)

2.00 mm (.079")

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/GXT 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

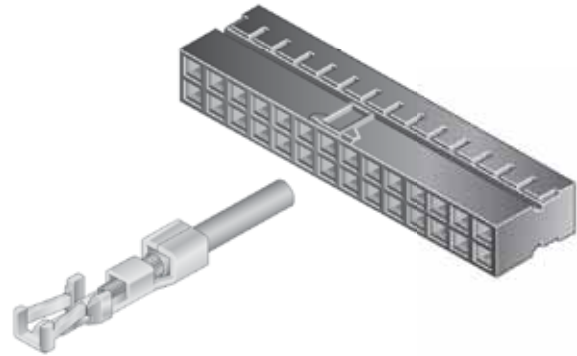
- Reels – Contacts
- Bags – Housings

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



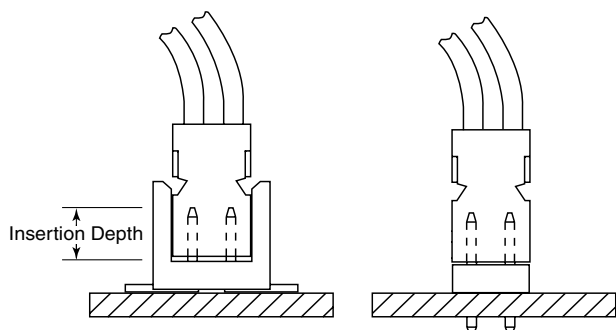
MATING DATA

- Minitek™ Unshrouded headers 50, 52, 56
- Minitek™ Shrouded headers 62, 64

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]

TYPICAL APPLICATIONS



Minitek™ Crimp-to-wire Housings and Contacts

PART NUMBERS

Contacts



26 AWG to 30 AWG

1 = 0,76 μm (30μ") gold/GXT on mating area,
0 = Gold flash

Housings



04 to 50 (Double Row)

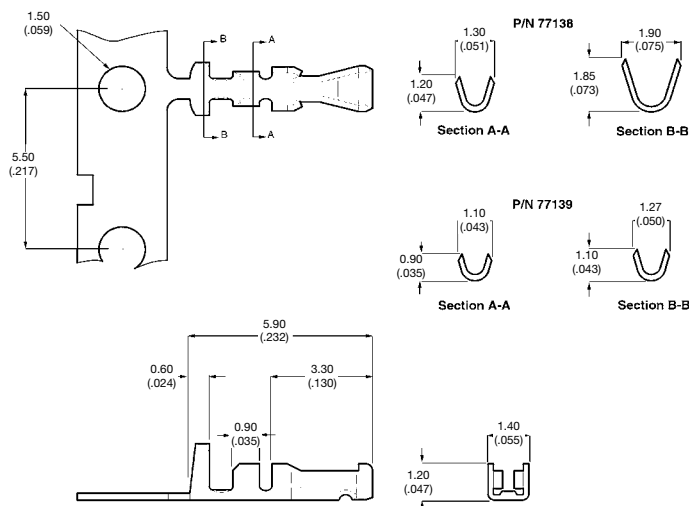
77138	101LF	CORE RANGE
10087010	0XXLF	

XX = 04, 06, 08, 10, 12, 16, 20

2.00 mm (.079")

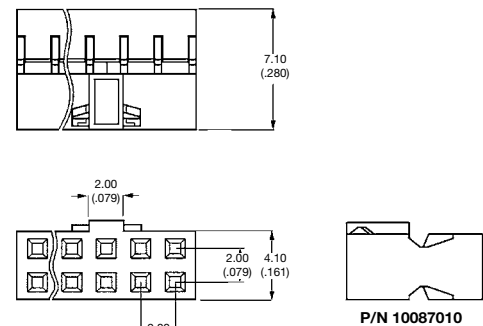
PRODUCT

Contacts



Dimension : mm (inch)

Housings



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: 1×10^5 M Ω 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

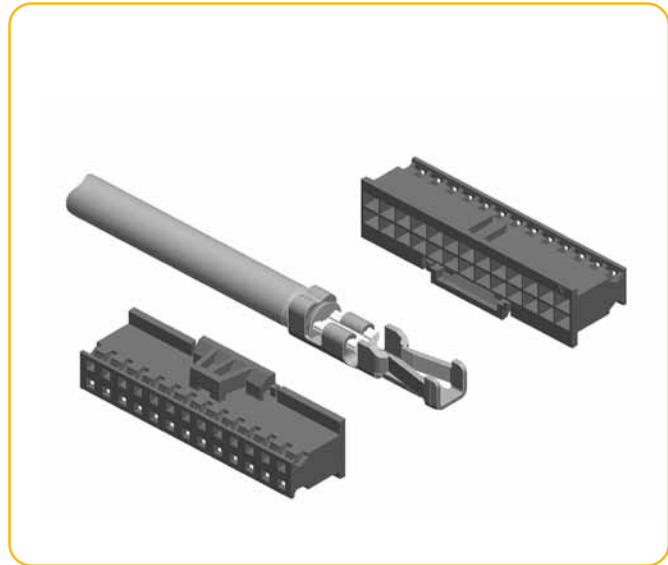
- ▶ Standard: Plastic bags

REFERENCE INFORMATION

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

RoHS INFORMATION

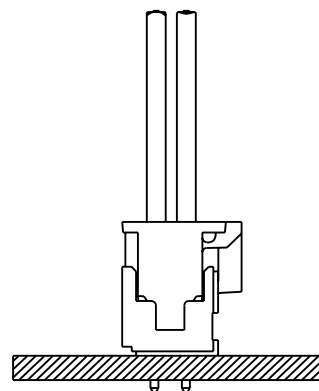
- ▶ This product is RoHs compatible according to the European Union Directive 2002/95/IEC



MATING DATA

- | | |
|-----------------------------|------------|
| ▶ Minitek™ Shrouded headers | 62, 64, 66 |
| ▶ Minitek™ CTW contacts | 70, 72 |

TYPICAL APPLICATIONS

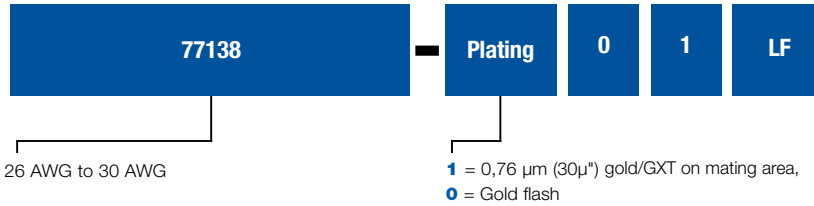


2.00 mm (.079")

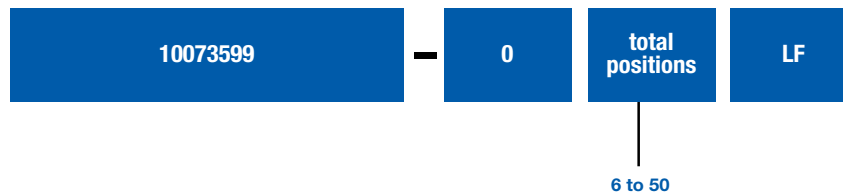
Minitek™ Crimp-to-wire Housings, Active latch


PART NUMBERS

Contacts



Housings



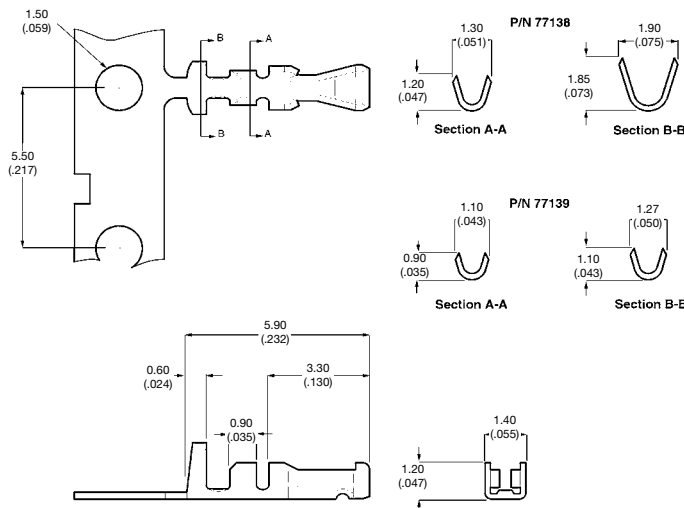
77138	-	101LF	
10073599	-	0XXLF	

XX = 06, 08, 10, 12, 16, 20

2.00 mm (.079")

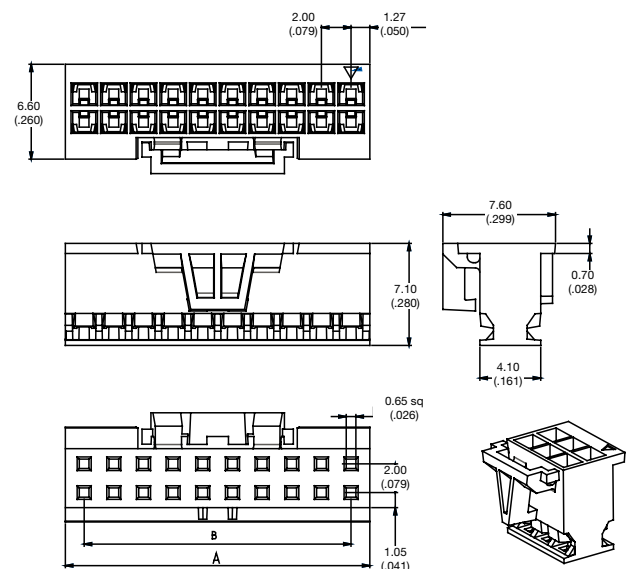
PRODUCT

Contacts



Dimension : mm (inch)

Housings



DESIGN FOR 10073599-006LF & 10073599-008LF ONLY

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/GXT over 1.27 μm (50 μ") nickel



ELECTRICAL PERFORMANCE

- ▶ Current rating: 1 A continuous
- ▶ Insulation resistance: 1x 10⁵ 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



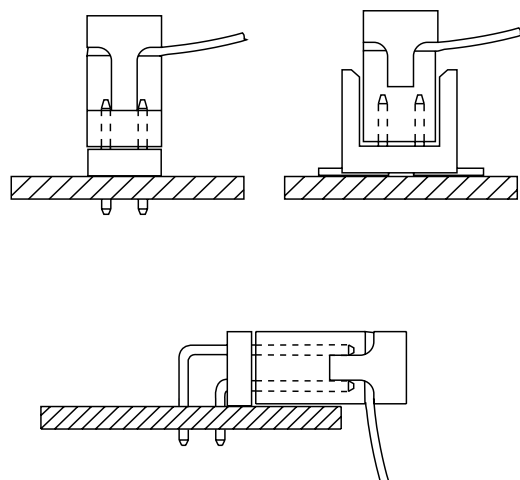
MATING DATA

- ▶ Minitek™ Unshrouded headers 50, 52, 56
- ▶ Minitek™ Shrouded headers 62, 64

INSERTION DEPTH

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

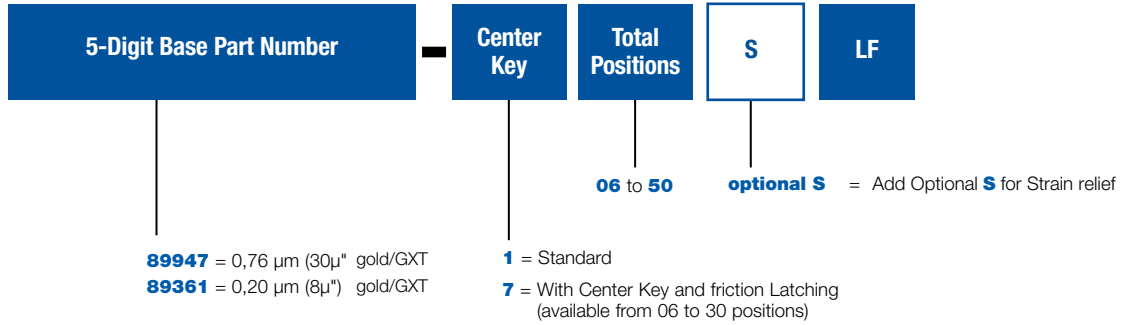
TYPICAL APPLICATIONS



2.00 mm (.079")

Minitek™ IDC Receptacle

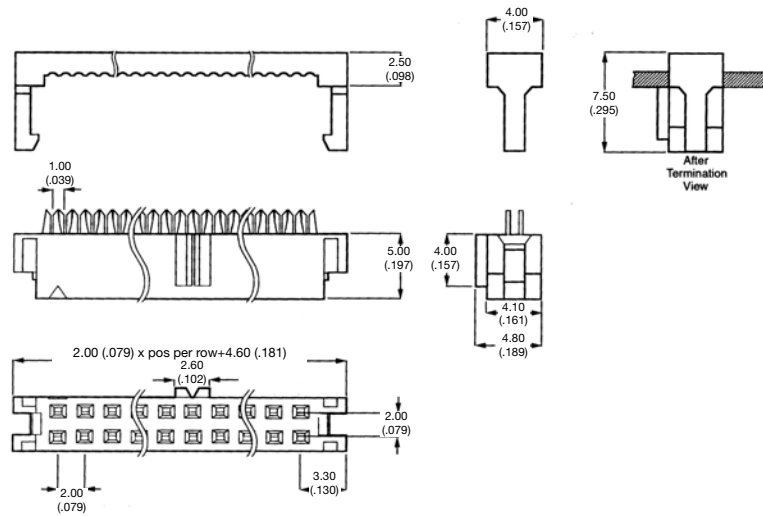
PART NUMBERS



89361 - 7XXLF **CORE RANGE**
 XX = 04, 06, 08, 10, 12, 16, 20

2.00 mm (.079")

PRODUCT



Dimension : mm (inch)

If you need something 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.

▀ Polarized (missing) positions

These are highly specific, so please contact us with your requirement



▀ Kinked legs

See drawing 69190 and 69192 at www.fciconnect.com



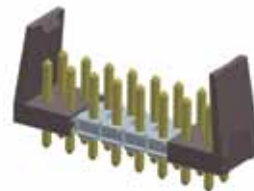
▀ Press-fit pins

See drawing 94674 at www.fciconnect.com



▀ Add-on latches for headers

Please contact us with your requirement

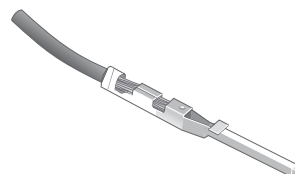


▀ Wide body headers



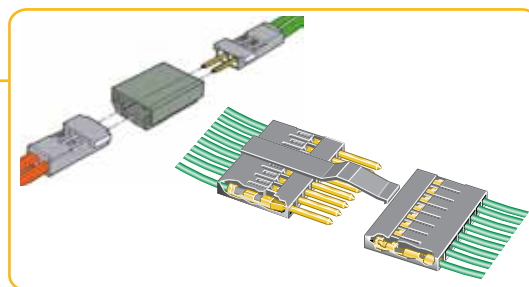
▀ Crimp-to-wire pin

See drawing 47791 and 75653 at www.fciconnect.com



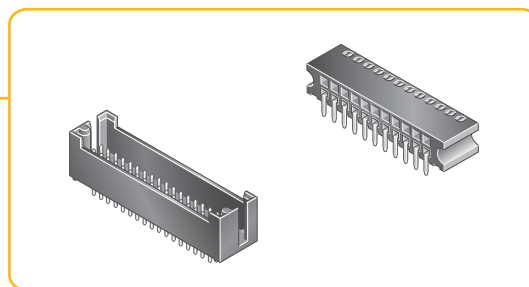
■ **Flying latch**

See drawing 67009,
68105 and 68106 at
www.fciconnect.com



■ **Guide pin header / receptacles**

See drawing 64991
and 66527 at
www.fciconnect.com



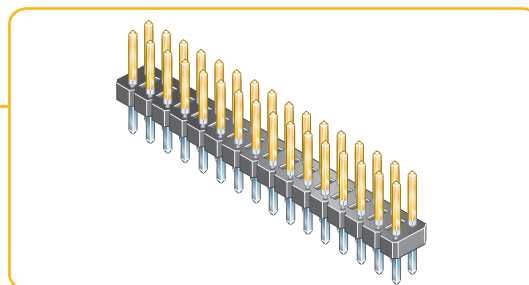
■ **Printed housings**

Please contact us with
your requirement



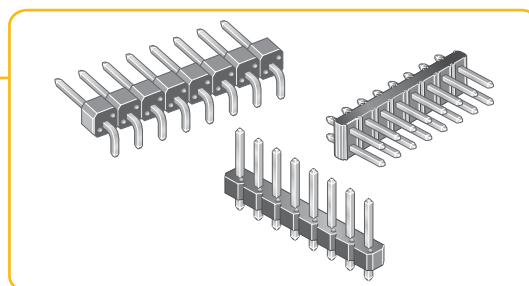
■ **Additional plating options**

Please contact us with
your requirement



■ **Pin-in-paste headers**

See drawing 10076801,
10082201 and 10082202 at
www.fciconnect.com



Visit: www.fciconnect.com/basicdesign 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	HT 151	155250-101	HT-0080
Minitek	AWG 32-36	HT 152	155250-102	HT-0080

BergStik® AND Bergstrip®

- ▀ Manual cutting tool: HT 320

Quickie® IDC

- ▀ Manual flat cable cutter: HT 209
- ▀ Quickie assembly hand tool: HT 210
- ▀ Hand Press: QP-104
- ▀ 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

PART NUMBER INDEX



BASE PART NUMBER	PAGE	BASE PART NUMBER	PAGE
47437	37	76342	23
47439	37	76347	31
47457	37	76357	31
47564	37	76382	29
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47566	37	76384	29
48047	37	76385	29
48048	37	77138	71, 73
48276	37	78207	35
52601	43	78208	35
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55508	59	87606	21
55510	59	89361	75
57102	51	89882	27
57202	51	89883	27
59112	57	89891	21
59132	57	89898	25
59202	57	89947	75
63453	58	91596	59
65039	39	91601	25
65043	39	91614	25
65239	33	91615	25
65240	33	91618	25
65846	39	95293	11
67996	9, 13	95278	11
67997	9, 13	98401	11
68000	9, 13	98414	63
68001	9, 13	98423	53
68002	9, 13	98424	63
68015	15	98464	65
68016	15	10056844	43
68020	15	10056845	43
68021	15	10072353	55
68602	9, 13	10073599	73
68786	19	10075024	55
69145	19	10075025	67
69167	35	10075324	67
69168	35	10078991	69
69830	49	10078995	69
71600	47	10087010	71
71607	27		
71609	27		
71918	45		
71920	21		
71922	45		
71991	23		
75867	41		
75869	41		
75915	21		
76341	23		

A large rectangular area with rounded corners, outlined in blue, containing 25 horizontal lines for writing notes.

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