# BergStik<sup>®</sup> UNSHROUDED HEADERS 2.54 mm (.100")

# VERTICAL SELECTIVE PLATING



## TECHNICAL DATA

### Physical

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

## Electrical Performance

- Current rating: 3 A continuous
- lnsulation resistance: 5000 M $\Omega$  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)

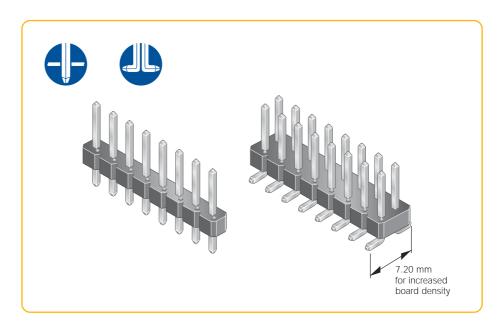
## Reference Information

- **S** 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 Specifications subject to change without notice.

## MATING DATA

Dubox <sup>™</sup> Crimp-to-wire contacts	34
Dubox™ Crimp-to-wire housings	36
Dubox™ Vertical receptacles	24
Dubox™ Low profile vertical	
receptacles	26, 28
Dubox™ Horizontal receptacles	30
Quickie™ IDC receptacles	50
PV™ Crimp-to-Wire Contacts	40
PV™ Crimp-to-Wire Housings	42

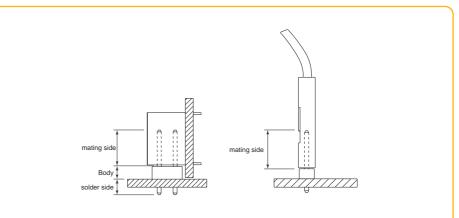


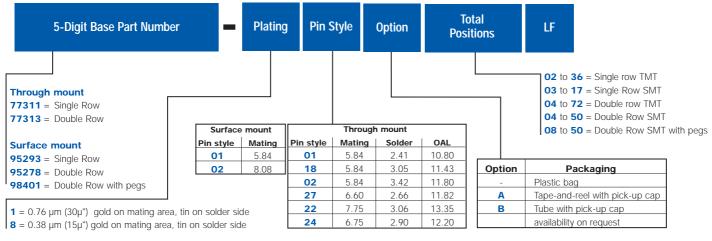
## **PROCESSING INFORMATION**

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

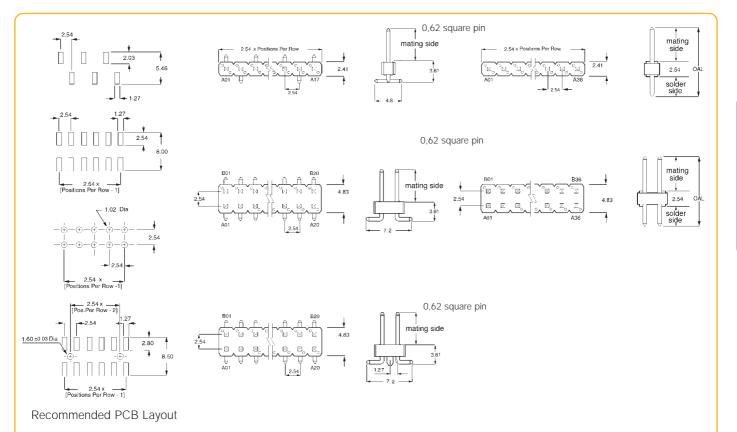
# **RoHs INFORMATION**

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









# BergStik<sup>®</sup> UNSHROUDED HEADERS 2.54 mm (.100")

# VERTICAL FULL PLATING



## **TECHNICAL DATA**

#### Physical

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

#### Electrical Performance

- Current rating: 3 A continuous
- Insulation resistance: 5000 M $\Omega$  min.
- Dielectric withstanding voltage: 1500 V

#### Mechanical Performance

- Pin retention to housing: 8.88 N (2 lbf) 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.

## MATING DATA

- Dubox™ Crimp-to-wire contacts
   34

   Dubox™ Crimp-to-wire housings
   36

   Dubox™ Vertical receptacles
   24

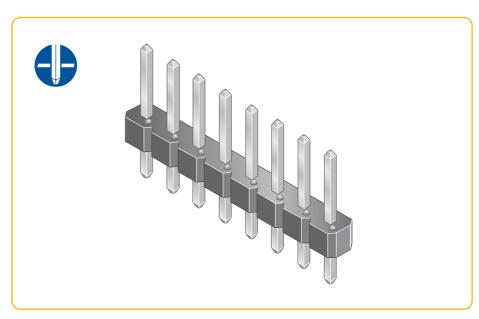
   Dubox™ Low profile vertical receptacles
   26, 28

   Dubox™ Horizontal receptacles
   30

   Quickie™ IDC receptacles
   50

   PV™ Crimp-to-Wire Contacts
   40
- PV™ Crimp-to-Wire Housings

42



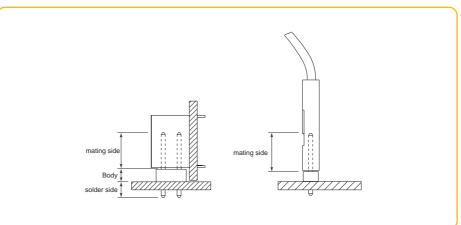
## **PROCESSING INFORMATION**

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

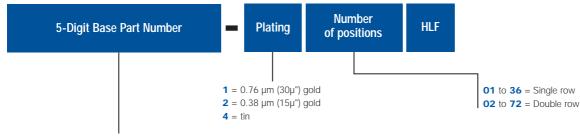
## **RoHs INFORMATION**

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

# **TYPICAL APPLICATIONS**



2.54 mm (.100")



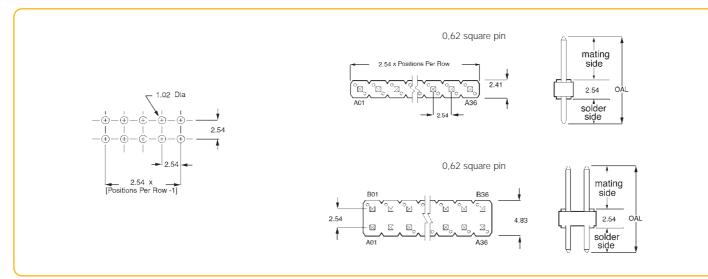
#### Single Row

	Po	ost	Ta	ail	0	OAL	
Base PN	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

	Post		Tail		OAL	
Base PN	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





# CONTINUOUS UNSHROUDED HEADERS 2.54 mm (.100")



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

#### TECHNICAL DATA Physical



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

#### **Electrical Performance**

- Current rating: 3 A continuous
- Insulation resistance: 5000 M $\Omega$  min.
- Dielectric withstanding voltage: 1500 V

#### Mechanical Performance

Pin retention to housing: 8.88 N (2 ibf) min.

**Operating Temperature Range** -65°C to +125°C

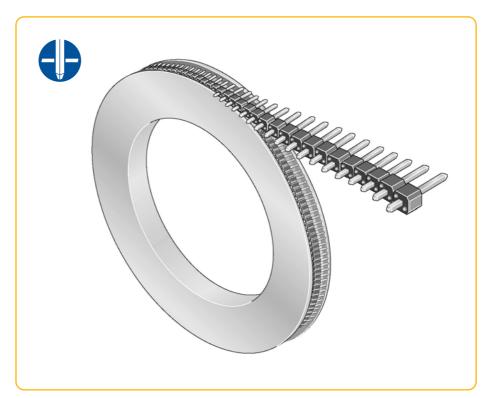
Packaging Reel

#### **Reference Information**

File no. E66906
 File no. LR46923
 Product drawing: 54101 or 54102
 Product specification: BUS-12-059
 Specifications subject to change without notice.

### MATING DATA

Dubox <sup>™</sup> Crimp-to-wire contacts	34
Dubox™ Crimp-to-wire housings	36
Dubox™ Vertical receptacles	24
Dubox™ Low profile vertical	
receptacles	26, 28
Dubox™ Horizontal receptacles	30
Quickie <sup>™</sup> IDC receptacles	50
PV™ Crimp-to-Wire Contacts	40
PV™ Crimp-to-Wire Housings	42



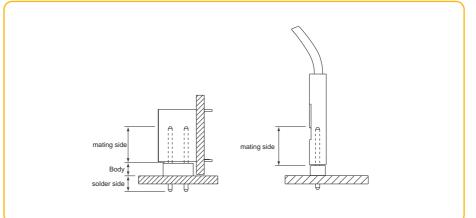
## **PROCESSING INFORMATION**

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

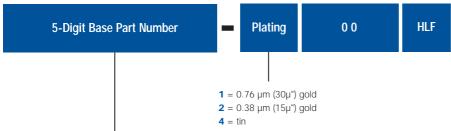
## **RoHs INFORMATION**

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

## **TYPICAL APPLICATIONS**



Automated cutting tooling is available for this product. Please contact your FCI partner.



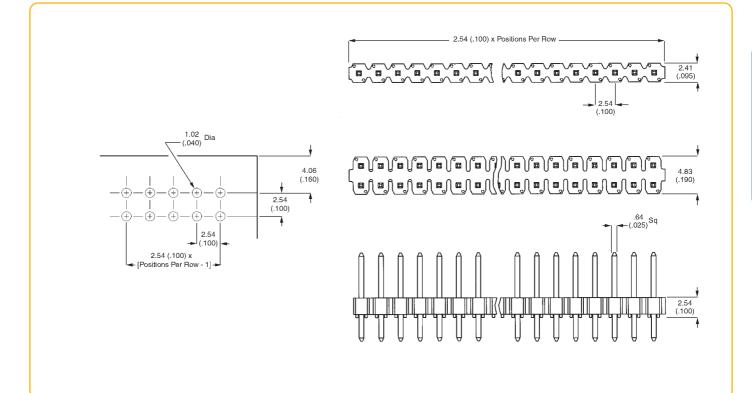
#### Single Row

	Post Tai		ail	0/	AL	
Base PN	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

	Post		Tail		OAL	
Base PN	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





# BergStik<sup>®</sup> UNSHROUDED HEADERS 2.54 mm (.100")

# **RIGHT ANGLE SELECTIVE PLATING**



High temperature plastic
 Selective plating

# TECHNICAL DATA

### Physical

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

#### **Electrical Performance**

- Current rating: 3 A continuous
- Insulation resistance: 5000 M $\Omega$  min.
- Dielectric withstanding voltage: 1500 V

#### Mechanical Performance

Pin retention to housing: 8.88 N min.

**Operating Temperature Range** -65°C to +125°C

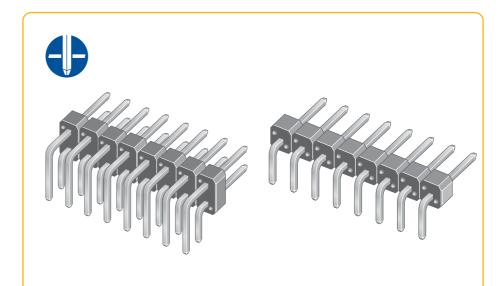
## Packaging

Bags

#### **Reference Information**

- File no. E66906
   File no. LR46923
- Product drawing: By 5-digit base part number

Product specification: BUS-12-114 Specifications subject to change without notice.



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42

## MATING DATA

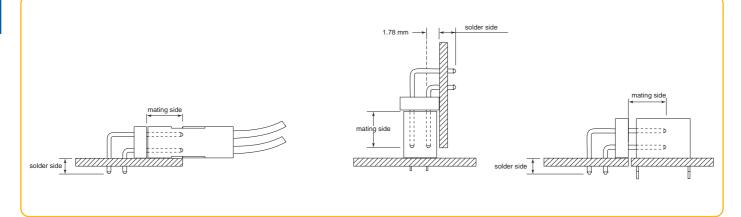
- Dubox™ Crimp-to-wire contacts 34
- Dubox™ Crimp-to-wire housings 36
- Dubox<sup>™</sup> Vertical receptacles Dubox<sup>™</sup> Low profile vertical
- receptacles 26, 28
- Dubox<sup>™</sup> Horizontal receptacles 30 Quickie<sup>™</sup> IDC receptacles 50
- PV<sup>™</sup> Crimp-to-Wire Contacts
- PV<sup>™</sup> Crimp-to-Wire Contacts

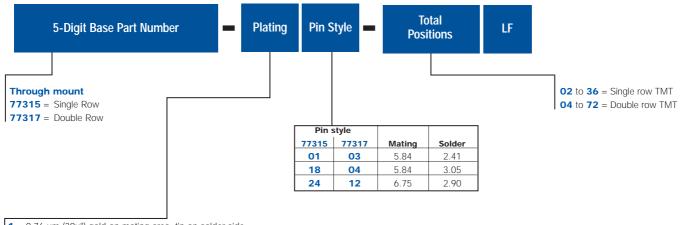
## **PROCESSING INFORMATION**

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

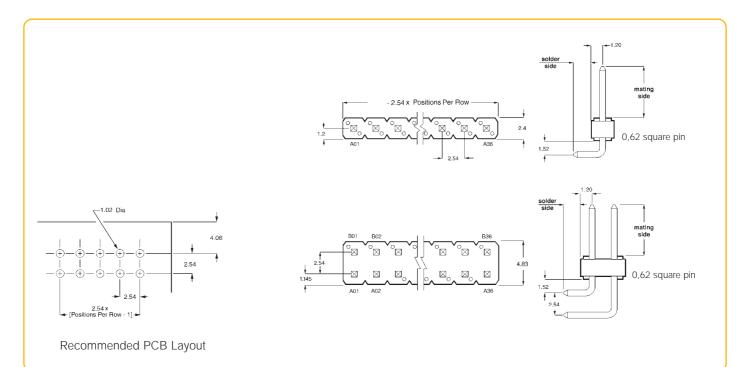




 $\mathbf{1}$  = 0.76  $\mu m$  (30 $\mu$ ") gold on mating area, tin on solder side

**4** = tin

 $\mathbf{8} = 0.38 \ \mu m \ (15 \mu'')$  gold on mating area, tin on solder side



# BergStik<sup>®</sup> UNSHROUDED HEADERS 2.54 mm (.100")

# **RIGHT ANGLE FULL PLATING**



## **TECHNICAL DATA**

#### Physical

Housing: High temperature, black thermoplastic



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

#### **Electrical Performance**

- Current rating: 3 A continuous
- Insulation resistance: 5000 M $\Omega$  min.
- Dielectric withstanding voltage: 1500 V

#### Mechanical Performance

- Pin retention to housing: 8.88 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
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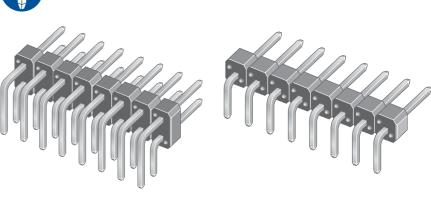
#### Packaging

Bags

#### **Reference Information**

**R** File no. E66906 SFile no. LR46923 Product drawing: 55101 or 55102 Product specification: BUS-12-114 Specifications subject to change without notice.





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## MATING DATA

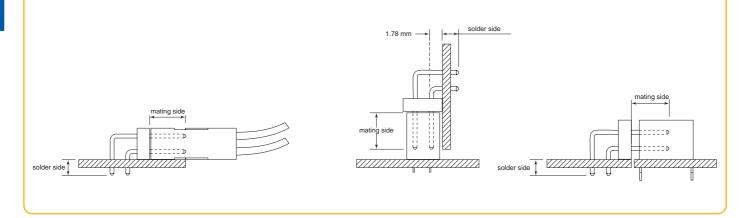
- Dubox<sup>™</sup> Crimp-to-wire contacts 34
- Dubox<sup>™</sup> Crimp-to-wire housings 36 24
- Dubox<sup>™</sup> Vertical receptacles Dubox<sup>™</sup> Low profile vertical
- receptacles 26, 28 Dubox<sup>™</sup> Horizontal receptacles
- 30 Quickie<sup>™</sup> IDC receptacles 50
- ► PV<sup>TM</sup> Crimp-to-Wire Contacts
- ▶ PV<sup>™</sup> Crimp-to-Wire Housings
  - 42

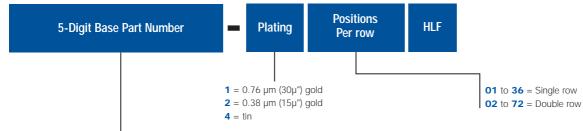
## **PROCESSING INFORMATION**

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



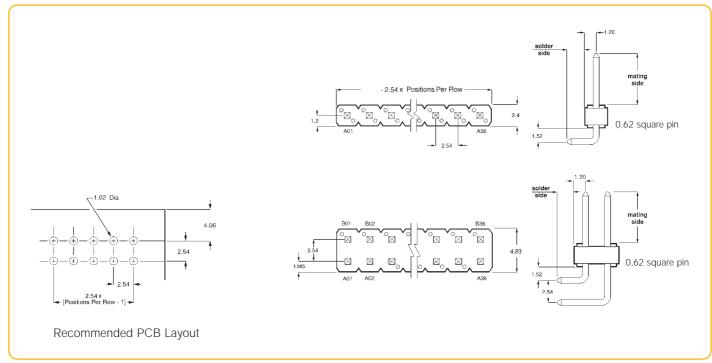


#### Single Row

	Po	ost	Ta	ail
Base PN	mm	(in.)	mm	(in.)
68015	5.84	0.230	2.29	0.095
68016	5.84	0.230	3.05	0.120

#### Double Row

	Po	ost	Т	ail
Base PN	mm	(in.)	mm	(in.)
68020	5.84	0.230	2.41	0.095
68021	5.84	0.230	3.05	0.120



# BergStik<sup>®</sup> UNSHROUDED STACKING HEADERS 2.54 mm (.100")



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

#### TECHNICAL DATA Physical

Housing: High temperature, black thermoplastic



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

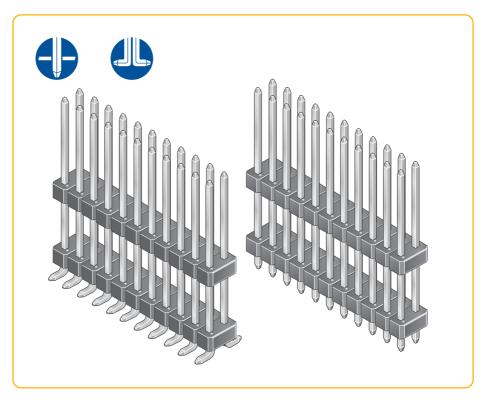
## **Reference Information**

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.

## MATING DATA

Dubox <sup>™</sup> Vertical receptacles	24
Dubox™ Low profile vertical	
receptacles	26,28

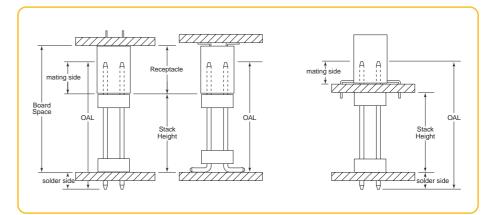


## **PROCESSING INFORMATION**

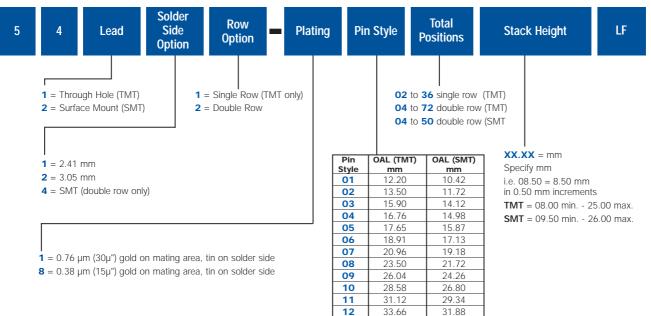
Compatible with wave, vapor-phase, and IR reflow soldering processes

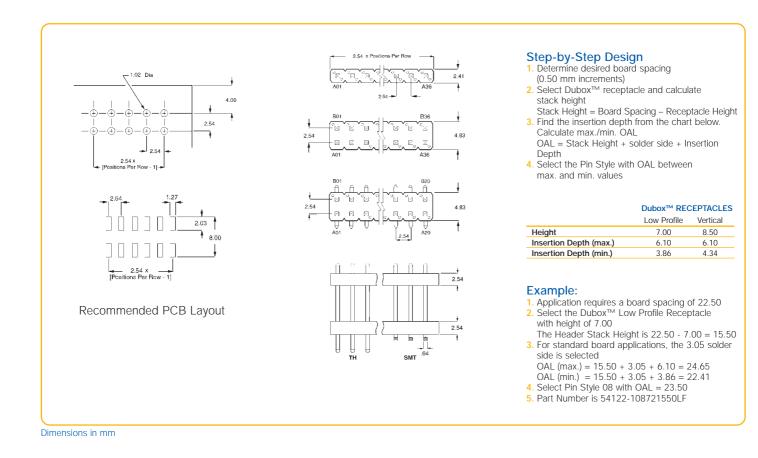
## **RoHs INFORMATION**

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









# Technical / Application Support / Drawings / Specifications / Samples: www.fciconnect.com/basics 21



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

## TECHNICAL DATA

# Physical Housing: Black thermoplastic



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

#### **Electrical Performance**

- Current rating: 2.5 A max. per contact
- Insulation resistance: 50,000 M $\Omega$  min.
- Contact resistance: 15 MΩ max. initial, 20 Ωm max. after environmental tests
- Dielectric withstanding voltage: 800 V

#### .. . . . .

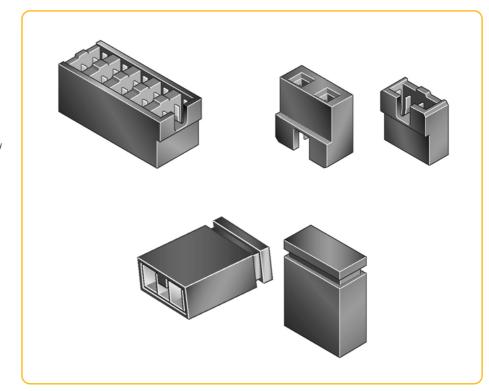
Mechanical Performance Mating cycles (durability): 50-Gold 25-Tin.

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** -55°C to +120°C

Packaging Plastic bags



#### **Reference Information**

File no. E66906
 File no. LR46923
 Product drawing: By 5-digit base number
 Product specification:

BUS-12-071 - Gold BUS-12-070 - Tin

Specifications subject to change without notice.

## MATING DATA

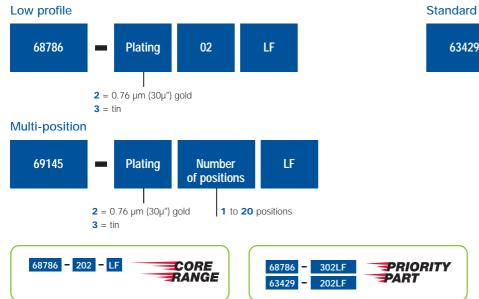
Continuous unshrouded headers 14 Unshrouded vertical headers 10, 12 Unshrouded right angle headers 16, 18

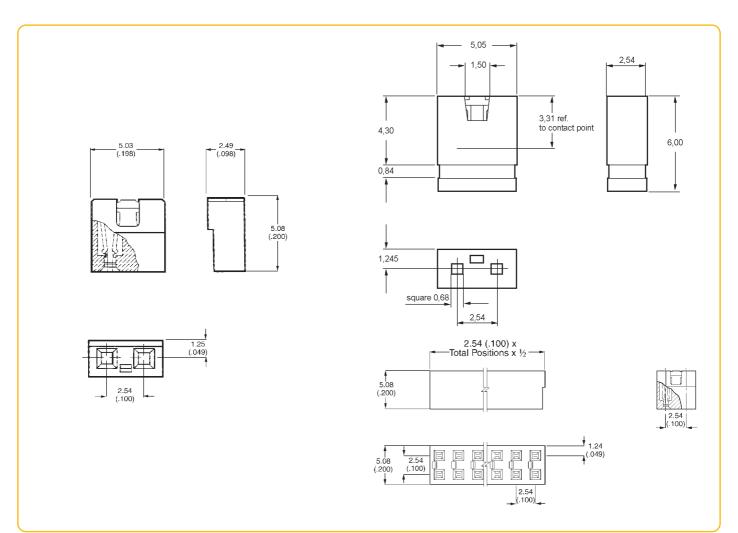
## **INSERTION DEPTH**

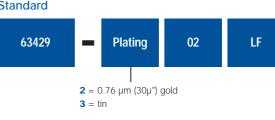
4.85 mm (.191") min. [provides 3.81 mm (.015") wipe] - Low profile

## **RoHs INFORMATION**

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







## Dubox<sup>™</sup> VERTICAL RECEPTACLES 2.54 mm (.100")



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

#### TECHNICAL DATA Physical

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

### **Electrical Performance**

#### Current rating:

- 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- lnsulation resistance: 1x 10<sup>5</sup> M $\Omega$  min.
- Contact resistance: 15 m $\Omega$  max. initial, 20 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

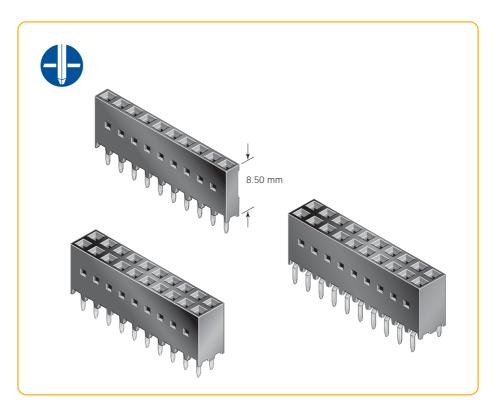
#### Packaging

Plastic boxes or tubes

#### **Reference Information**

- **File no. E66906**
- Gr File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: HE 13/14 and IEC 603-8

Specifications subject to change without notice.



## MATING DATA

	BergStik <sup>®</sup> Unshrouded		
	vertical headers	10,	12
ļ	BergStik <sup>®</sup> Unshrouded		
	right angle headers	16,	18
	BergStik <sup>®</sup> Unshrouded		
	stacking headers		20
	BergStik <sup>®</sup> continuous Unshroude	d	
	headers		14

## **INSERTION DEPTH**

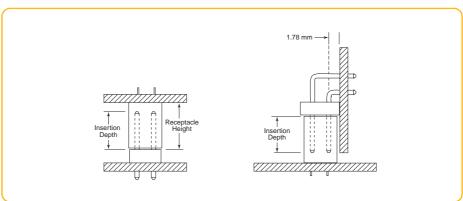
- Top Entry: 3.86 mm min. to 6.81 mm max. [provides .381 mm wipe]
- Bottom Entry: 6.25 mm min. [provides .381 mm wipe] plus board thickness

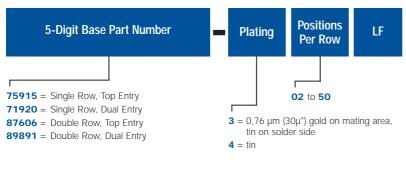
## **PROCESSING INFORMATION**

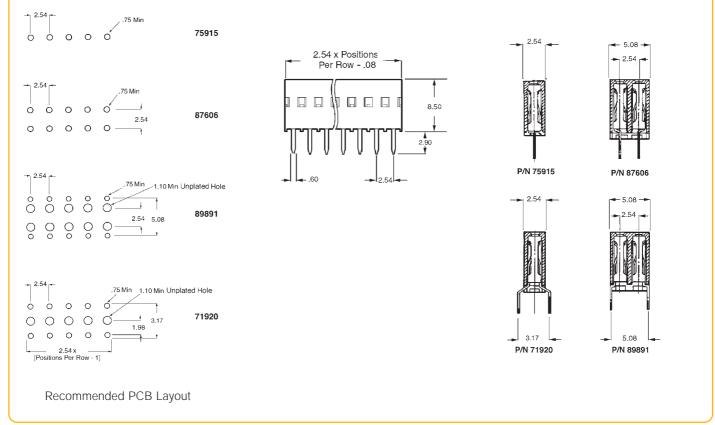
Compatible with wave soldering processes

## **RoHs INFORMATION**

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









- The Dubox<sup>™</sup> 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
- Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel

#### **Electrical Performance**

Current rating:

- 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- Insulation resistance: 1x 10<sup>5</sup> M $\Omega$  min.
- Contact resistance: 15 m $\Omega$  max. initial, 20 m $\Omega$  max. after environmental tests
- Dielectric withstanding voltage: 1000 V rms

#### Mechanical Performance

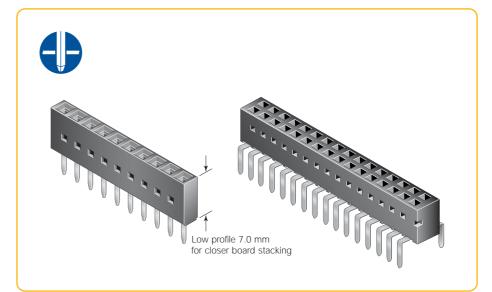
- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150 gf) avg.
- Withdrawal force per gold contact: 0.30 N (30 gf) min.

#### **Operating Temperature Range**

-65°C to +125°C

#### Packaging

Plastic boxes or tubes



#### **Reference Information**

#### **S** File no. E66906

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

Specifications subject to change without notice.

## MATING DATA

BergStik <sup>®</sup> Unshrouded		
vertical headers	10,	12
BergStik <sup>®</sup> Unshrouded		
right angle headers	16,	18
BergStik <sup>®</sup> Unshrouded		
stacking headers		20
BergStik <sup>®</sup> continuous Unshroude	ed	
headers		14

## **INSERTION DEPTH**

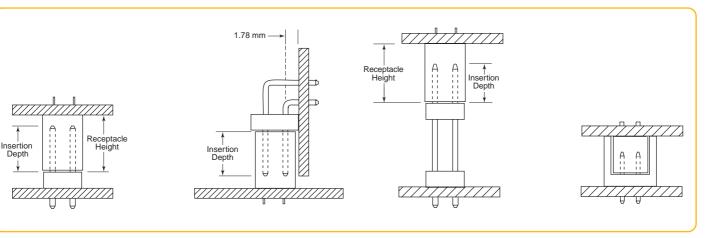
- Top Entry: 3.86 mm min. to 6.10 mm max. [provides .381 mm wipe]
- Bottom Entry: 5.08 mm min. [provides .381 mm wipe] plus board thickness

## **PROCESSING INFORMATION**

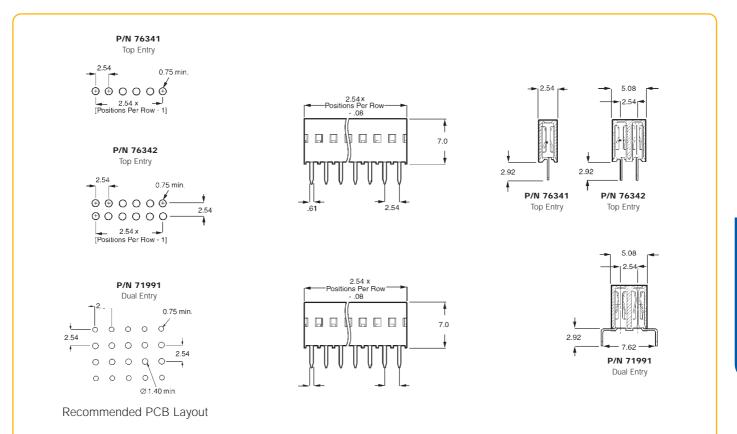
Compatible with wave soldering processes

## **RoHs INFORMATION**

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



#### PART NUMBER Positions 5-Digit Base Part Number Plating LF Per Row I Г 76341 = Single Row, Top Entry 02 to 50 76342 = Double Row, Top Entry Г $\mathbf{3} = 0,76 \ \mu m \ (30 \mu'')$ gold on mating area, tin on solder side 71991 = Double Row, Dual Entry **4** = tin PRIORITY PART 71991 - 3XXLF XX = 05 - 20



Dimensions in mm

2.54 mm (.100")



- The Dubox<sup>™</sup> 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: High-temperature, grey thermoplastic
- Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel

#### **Electrical Performance**

- Current rating:
- 3 A dc max. per individual contact 2 A dc max. per contact for fully energized connector
- Insulation resistance: 1x 10<sup>5</sup> M $\Omega$  min.
- Contact resistance: 15 m $\Omega$  max. initial, 20 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) avg.
- Withdrawal force per gold contact: 0.30 N (30 gf) min.

#### **Operating Temperature Range**

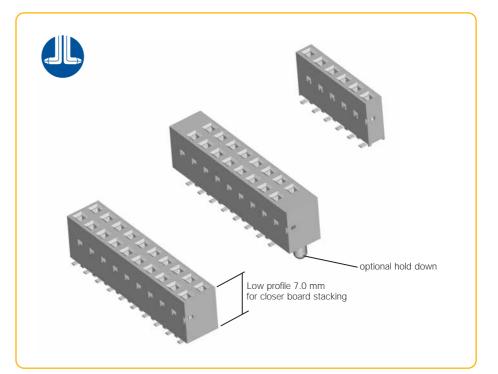
-65°C to +125°C

## Packaging

Tubes, Tape on Reel or plastic boxes

#### **Reference Information**

- 🔊 File no. E66906
- **•** File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: BUS-12-055
- Tape and Reel packaging data : TA-856 Specifications subject to change without notice.



## MATING DATA

BergStik <sup>®</sup> Unshrouded		
vertical headers	10,	12
BergStik <sup>®</sup> Unshrouded		
right angle headers	16,	18
BergStik <sup>®</sup> Unshrouded		
stacking headers		20
BergStik <sup>®</sup> continuous Unshrouded	d	
headers		14

## **INSERTION DEPTH**

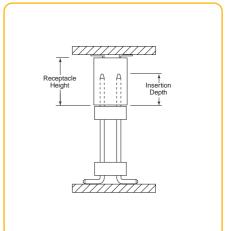
- Top Entry: 3.86 mm min. to 6.10 mm max. [provides .381 mm wipe]
- Bottom Entry: 5.08 mm min. [provides .381 mm wipe] plus board thickness

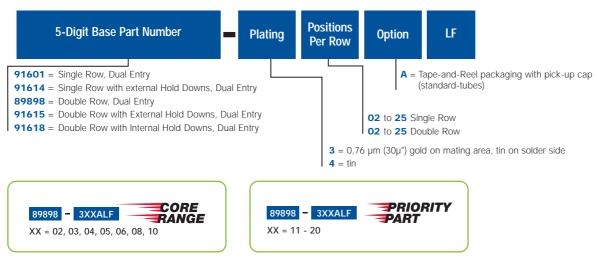
## **PROCESSING INFORMATION**

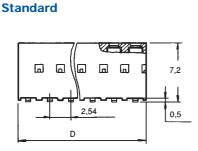
- Compatible with wave, vapor-phase, and
- IR reflow soldering processes Recommended IR profile: TA-842

## **RoHs INFORMATION**

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

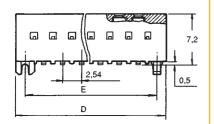






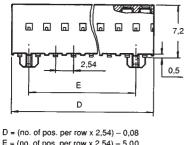
D = (no. of pos. per row x 2,54) - 0,08

## **External Hold Downs**



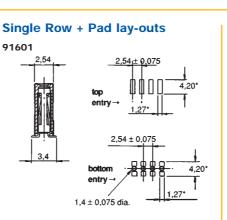
D = (no. of pos. per row x 2,54) + 5E = (no. of pos. per row x 2,54) + 2,54

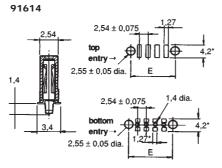
#### **Internal Hold Downs**



E = (no. of pos. per row x 2,54) - 5,00

Dimensions in mm

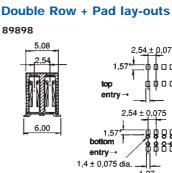


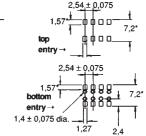


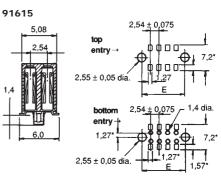
\*Note: available as of 3 position versions

#### not available in single row

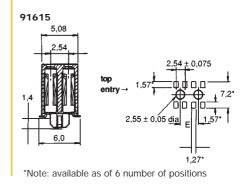
Note: All dimensions marked with \* are minimum dimensions







\*Note: available as of 3 position versions



# Dubox<sup>™</sup> HORIZONTAL RECEPTACLES 2.54 mm (.100")



- The Dubox<sup>™</sup> 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 temperature grey



- thermoplastic Surface mount
- Flammability rating: UL 94 V-0
- Contact: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50 μ") nickel

#### **Electrical Performance**

- Current rating:
- 3 A dc max. per individual contact
- 2 A dc max. per contact
- for fully energized connector
- Insulation resistance: 1x 10<sup>5</sup> M $\Omega$  min.
- Contact resistance: 15 m $\Omega$  max. initial,
- 20 m $\Omega$  max. after environmental tests
- Dielectric withstanding voltage: 1000 V

#### Mechanical Performance

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

#### **Operating Temperature Range**

-65°C to +125°C

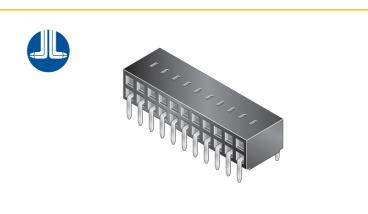
#### Packaging

2.54 mm (.100")

Standard: Tubes Optional: Tape-and-reel

#### **Reference Information**

- A File no. E66906
- G: 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 Specifications subject to change without notice.



## MATING DATA

BergStik <sup>®</sup> Unshrouded	
vertical headers	10, 12
BergStik <sup>®</sup> Unshrouded	
right angle headers	16, 18
BergStik <sup>®</sup> continuous	
Unshrouded headers	14

## **INSERTION DEPTH**

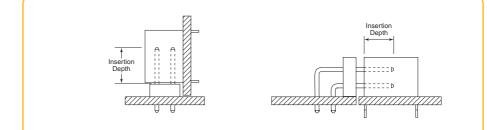
5.00 mm min. to 7.50 mm max. [provides .381 mm wipe]

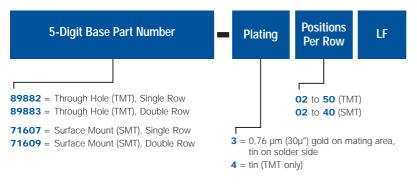
## PROCESSING INFORMATION

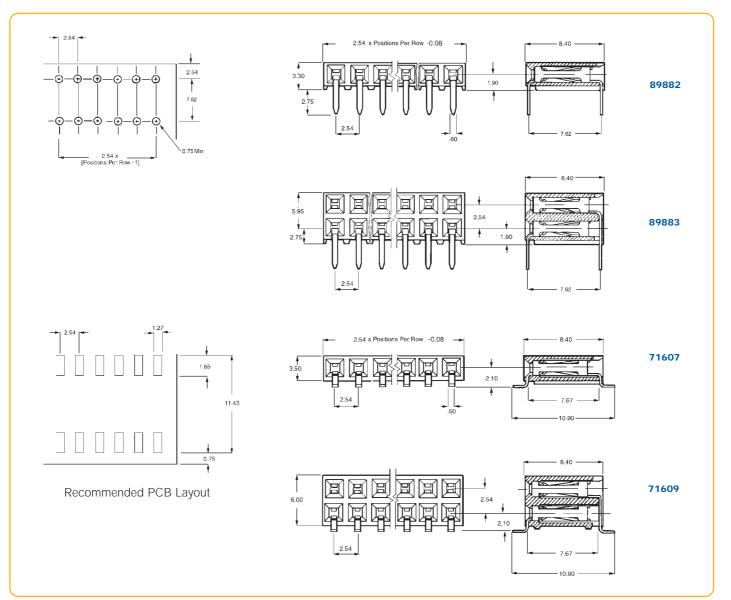
- Series 89882, 89883: compatible with wave soldering processes
- Series 71607, 71609: compatible with wave, vapor-phase and IR reflow soldering processes

## **RoHs INFORMATION**

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







# Dubox<sup>™</sup> SHROUDED HEADERS 2.54 mm (.100")



- For use with Dubox<sup>™</sup> crimp-to-wire housings
- Stackable end-to-end
- Passive latching, anti-reverse and anti-miss-match when used with Dubox<sup>™</sup> 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: Phosphor-bronze
- Plating: Gold or tin over 1.27 μm (50μ") nickel

#### **Electrical Performance**

- Current rating: 3 A continuous
- Insulation resistance: 1x 10<sup>5</sup> M $\Omega$  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

Tube

#### Reference Information

File no. E66906
 File no. LR46923
 Product drawing: By 5-digit base part number
 Application specification: TA-531
 Specifications subject to change without notice.

## MATING DATA

 Dubox™ Crimp-to-wire contacts
 34

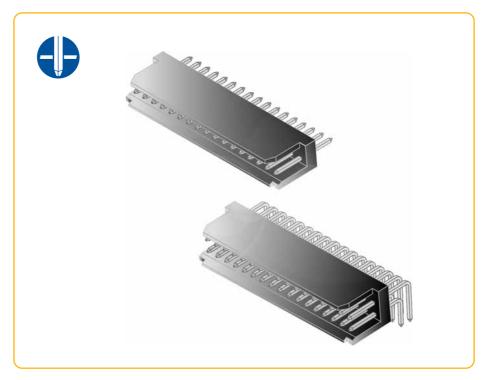
 Dubox™ Crimp-to-wire housings
 36

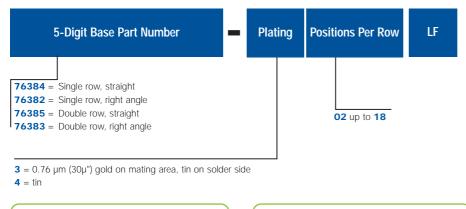
## **PROCESSING INFORMATION**

Compatible with wave soldering processes

## **RoHs INFORMATION**

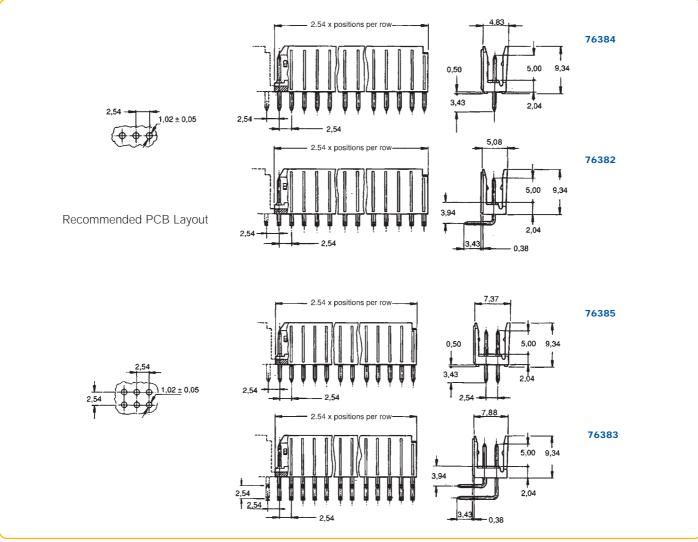
This product is RoHs compatible according to the European Union Directive 2002/95/IEC











# Dubox<sup>™</sup> CRIMP-TO-WIRE CONTACTS 2.54 mm (.100")



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

#### TECHNICAL DATA Physical

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

#### **Electrical Performance**

- Current rating: 3 A continuous
- Contact resistance after environmental test: 15 mΩ 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

## **Operating Temperature Range**

-65°C to +125°C

## Packaging

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 Specifications subject to change without notice.

MATING DATA

BergStik <sup>®</sup> unshrouded	
straight headers	10, 12
BergStik <sup>®</sup> unshrouded	
right angle headers	16, 18
Dubox™ shrouded	
vert./ra. headers	32
BergStik <sup>®</sup> continuous	
unshrouded headers	14

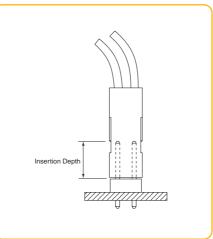


## **INSERTION DEPTH**

- Discrete Wire: 3.56 mm min. to 5.59 mm max. [provides .381 mm wipe]
- Crimp-to-Wire Housing: 5.08 mm min. to 6.22 mm max. [provides .381 mm wipe in housing]

## **RoHs INFORMATION**

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



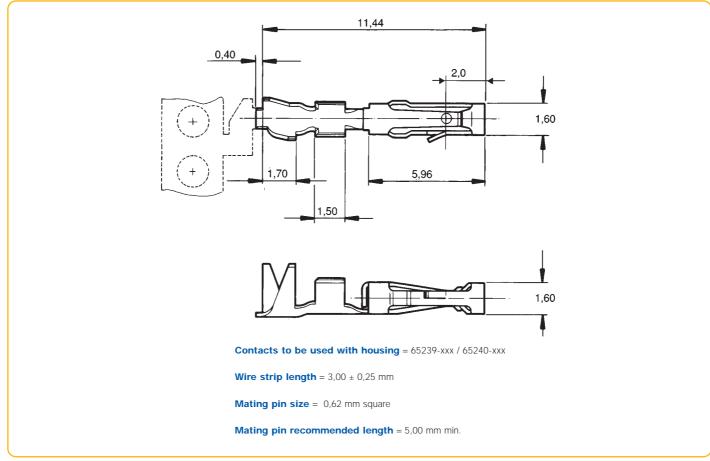
### Part numbers / Contacts on Reel

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

#### Part numbers / Contacts loose Piece

Wire size	insulation O.D.	Selective Gold Plated	Tin plated	Packaging		
22-30	0.90 - 1.50	76357-301LF	76357-401LF	1000/box		
22-30 0.90 - 1.50 76337-301LP 76357-401LP 1000/b0x						
Notes: • = reeled for application machine with left-to-right feeding						





# Dubox<sup>™</sup> CRIMP-TO-WIRE HOUSINGS 2.54 mm (.100")



- For use with Dubox<sup>™</sup> crimp-to-wire contacts
- Stackable end-to-end
- Passive latching, anti-reverse and anti-miss-match when used with Dubox<sup>™</sup> shrouded headers
- Contacts removable for easy repairability

#### TECHNICAL DATA Physical

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

#### **Electrical Performance**

Insulation resistance: 1x 105 M $\Omega$  min Dielectric withstanding voltage:

1000 V rms

## Operating Temperature Range

-65°C to +125°C

#### Packaging

Bulk

#### **Reference Information**

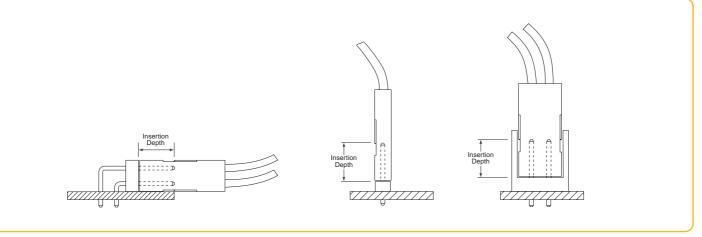
**File no. E66906 File no. LR46923** 

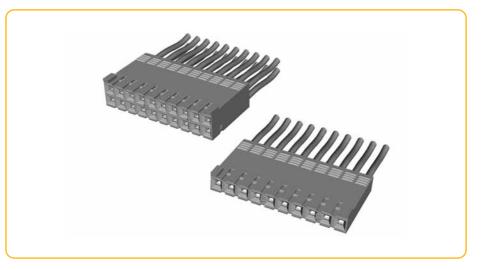
- Product drawing: By 5-digit base part number
- Application specification: TA-317, TA-340

Specifications subject to change without notice.

## **TYPICAL APPLICATIONS**







## MATING DATA

BergStik <sup>®</sup> unshrouded	
vertical headers	10, 12
BergStik <sup>®</sup> unshrouded	
right angle headers	16, 18
Dubox™ shrouded	
headers	32

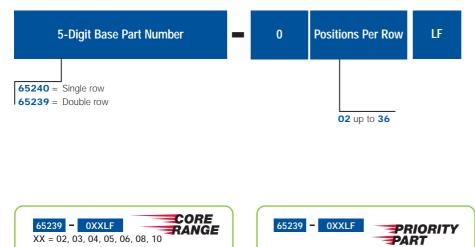
## **INSERTION DEPTH**

▶ 4.0 mm min. to 6.0 mm max.

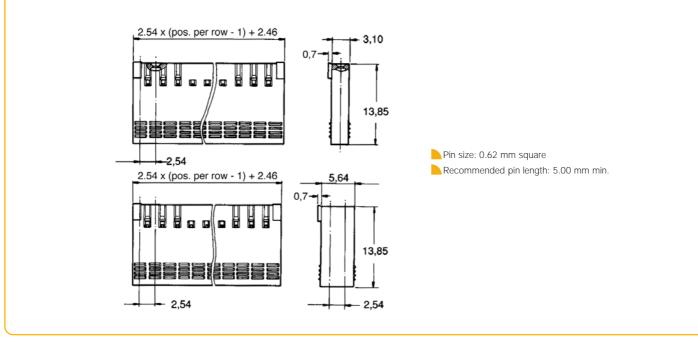
## **RoHs INFORMATION**

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

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



XX = 02 - 18



# **PV™ SHROUDED HEADERS** 2.54 mm (.100")



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

# **TECHNICAL DATA**

### Physical

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

#### **Electrical Performance**

- Current rating: 3 A continuous
- Insulation resistance: 100000 m $\Omega$  min.
- Dielectric withstanding voltage: 1000 V

#### **Mechanical Performance**

Contact retention to housing: 17.76 N min.

#### **Operating Temperature Range** -40°C to +95°C

# Packaging

Bags

## **Reference Information**

**File no. E66906** Se File no. LR46923

Product drawing: By 5-digit base part number

Product specification: BUS-12-067 BUS-12-075

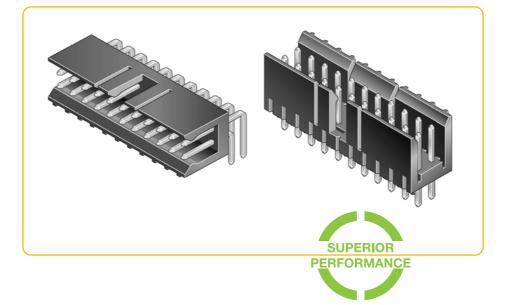
Application specification: TA-531 Specifications subject to change without notice.

## MATING DATA

PV™ Crimp-to-wire contact	40
PV™ crimp-to-wire housings	42

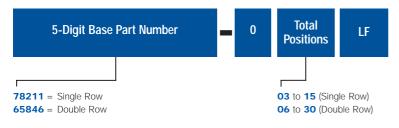
## **PROCESSING INFORMATION**

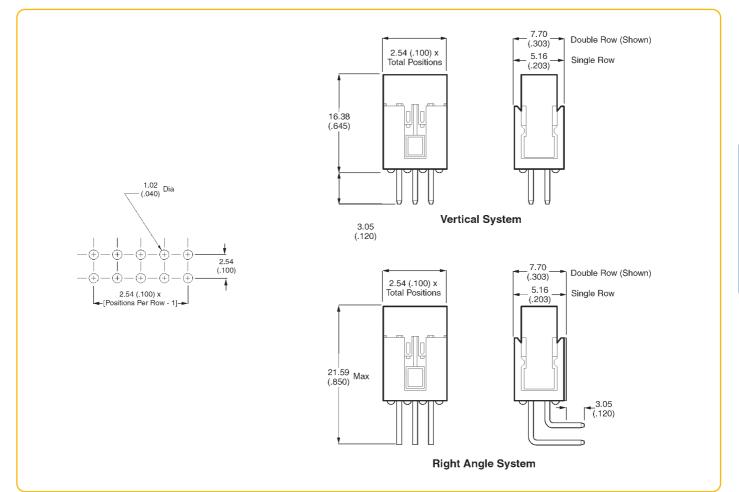
This product is RoHs compatible according to the European Union Directive 2002/95/IEC



#### PART NUMBER Total HLF 5-Digit Base Part Number Plating Positions ſ ſ 1 = 0.76 $\mu m$ (30 $\mu ")$ Vertical Gold 69167 = Single Row **4** = tin 69168 = Double Row ſ Right Angle 03 to 15 (Single Row) 78208 = Single Row 06 to 30 (Double Row) 78207 = Double Row

#### Housings





## PV<sup>™</sup> CRIMP-TO-WIRE CONTACTS 2.54 mm (.100")



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

# **TECHNICAL DATA**

## Physical

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

#### **Electrical Performance**

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

#### **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

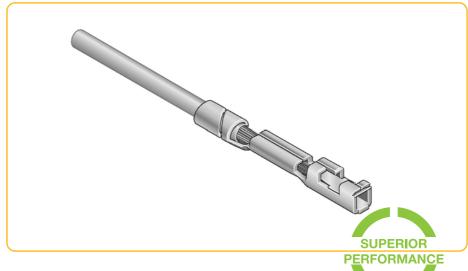
Reels Boxes - Loose piece

- **Reference Information**
- **SI** File no. E66906 SFile no. LR46923
- Product drawing: By 5-digit base part number
- Product specification:
- BUS-12-067 Contact Application specification:
- TA-75, TA-146 Contact

Specifications subject to change without notice.

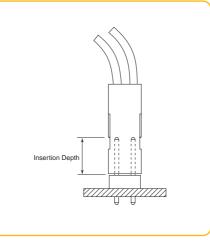
## MATING DATA

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



## **INSERTION DEPTH**

- Discrete Wire: 3.56 mm (.140") min. to 5.59 mm (.220") max.
- [provides . 381 mm (.015") wipe] Crimp-to-Wire Housing: 5.08 mm (.200") min. to 6.22 mm (.245") max. [provides . 381 mm (.015") wipe in housing]



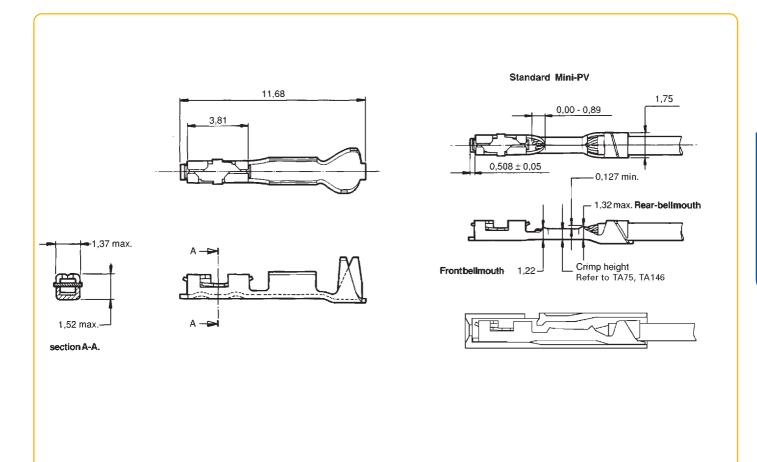
## 5-Digit Base Part Number

3-Digit Dash Number

HOW TO SELECT THE RIGHT CONTACT				
Step 1	Select Application			
Step 2	Select Spring Force			
Step 3	Select Wire Size			

1		2
Applicat	ion	Spring Force
Housing		
40-72	Contacts Per Housing	Standard
10-50	Contacts Per Housing	High
2-20	Contacts Per Housing	Ultra High
Discret	te Contact	Ultra High

Wire Size (AWG)	Application Spring Force	Part Number
18, 20	Standard	48231-000
or two 22	High	48047-000
or two 24	Ultra High	48052-000
22, 24, 26	Standard	48049-000
or two 26	High	48046-000
or two 28	Ultra High	48051-000
28, 30, 32	Standard	48048-000
or two 30	High	48045-000
or two 32	Ultra High	48050-000
	Standard	75543-015
32, 34, 36	High	75543-013
	Ultra High	75543-017



## **PV™ CRIMP-TO-WIRE HOUSINGS** 2.54 mm (.100")



Lowest profile housing in the industry Designed for use with our high reliability PV<sup>™</sup> Contact

## **TECHNICAL DATA**

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

#### **Electrical Performance**

Insulation resistance: 100,000 M $\Omega$  min Dielectric withstanding voltage: 1000 V min.

#### **Mechanical Performance**

Contact retention to housing: 17.76 N min.

#### **Operating Temperature Range** -40°C to +105°C

Packaging Bags

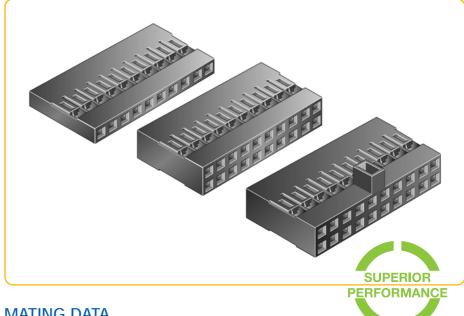
#### **Reference Information**

- **File no. E66906**
- **G** File no. LR46923 Product drawing: By 5-digit base part number

Product specification: BUS-12-067

Application specification: TA-531

Specifications subject to change without notice.

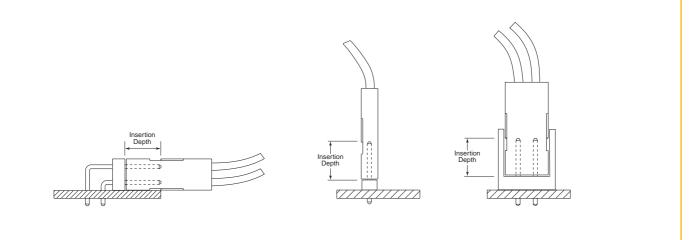


## MATING DATA

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

## **INSERTION DEPTH**

▶ 5.08 mm (.200") min. to 6.22 mm (.245") max. [provides .381 mm (.015") wipe in housing]



5-Digit Base Part Number



65039 = Single Row

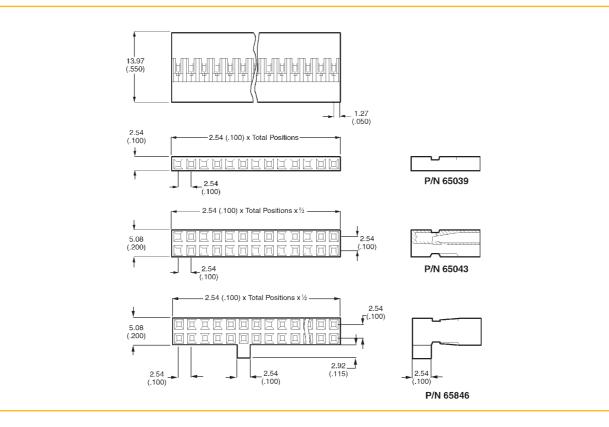
78211 = Single Row with Center Key

65043 = Double Row

Γ

65846 = Double Row v	with Center K	ey				
		Sing	le Row		Doul	ble Row
	Total Positions	65039	78211	Total Positions	65043	65846
	1	-036		4	-035	-014
	2	-035		6	-034	-015
	3	-034	-003	8	-033	-016
	4	-033	-004	10	-032	-010
	5	-032	-005	12	-031	-017
	6	-031	-006	14	-030	-007
	7	-030	-007	16	-029	-011
	8	-029	-008	18	-028	-008
	9	-028	-009	20	-027	-006
	10	-027	-010	22	-026	-018
	11	-026	-011	24	-025	-001
	12	-025	-012	26	-024	-019
	13	-024	-013	28	-023	-020
	14	-023	-014	30	-022	-002
	15	-022	-015	32	-021	-021
	16	-021		34	-020	-022
	17	-020		36	-019	-023
	18	-019		38	-018	-003

	Sing	le Row		Dou	ble Row
Total Positions	65039	78211	Total Positions	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	-012
25	-012		52	-011	-028
26	-011		54	-010	-005
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				



# Quickie<sup>™</sup> SHROUDED LOW PROFILE HEADERS 2.54 mm (.100")



- 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 or tin over 1.27 μm (50μ") nickel

#### **Electrical Performance**

- Current rating: 3 A continuous
- lnsulation resistance: 10,000 M $\Omega$  min
- Dielectric withstanding voltage: 500 V min.

Mechanical Performance

Pin retention to housing: 20 N min.

**Operating Temperature Range** -65°C to +125°C

Packaging Tubes

#### **Reference Information**

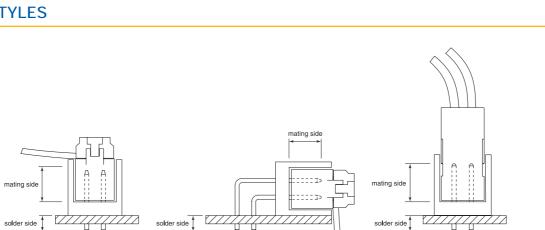
- 🔊 File no. E66906
- Se File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: BUS-12-082

Specifications subject to change without notice.

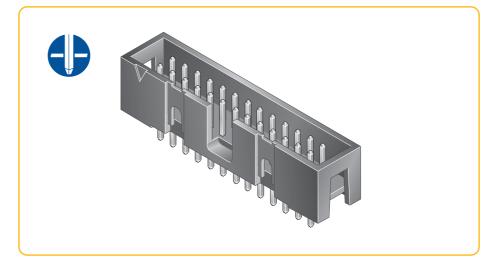
Standard Latch (Style 1)

## LATCHING STYLES





Low profile Latch (Style 2)



## MATING DATA

Quickie<sup>™</sup> IDC receptacles 50

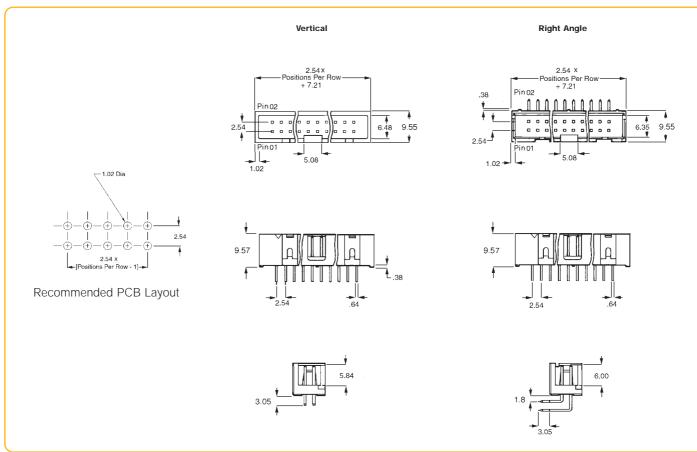
## **PROCESSING INFORMATION**

Compatible with wave soldering processes

## **RoHs INFORMATION**

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

5-Digit Base Part Number	Platin	g F	Total Positions	LF
Through mount 75869 = Vertical 75867 = Right angle			<b>30</b> = 4 pos. <b>31</b> = 6 pos. <b>32</b> = 8 pos. <b>01</b> = 10 pos. <b>02</b> = 14 pos. <b>03</b> = 16 pos. <b>04</b> = 20 pos. <b>05</b> = 26 pos. <b>06</b> = 34 pos.	
<ul> <li>1 = 0.76 μm (30μ") gold on mating area, tin on solder side</li> <li>2 = tin</li> <li>3 = 0.38 μm (15μ") gold on mating area, tin on solder side</li> </ul>			<b>07</b> = 40 pos. <b>08</b> = 50 pos. <b>09</b> = 60 pos. <b>10</b> = 64 pos.	





- 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 or tin over 1.27 μm (50μ") nickel

#### **Electrical Performance**

- Current rating: 3 A continuous
- lnsulation resistance: 10,000 M $\Omega$  min.
- Dielectric withstanding voltage: 500 V rms

Mechanical Performance

Pin retention to housing: 20 N min.

## Operating Temperature Range

-65°C to +125°C

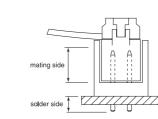
#### Packaging

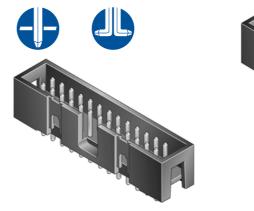
SMT: Tape-and-reel with pick-up cap PiP: Tube with pick-up cap

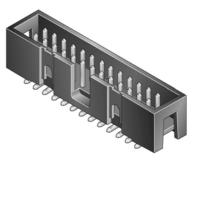
#### **Reference Information**

File no. E66906
 File no. LR46923
 Product drawing: By 5-digit base part number
 Product specification: BUS-12-055
 Specifications subject to change without notice.

# TYPICAL APPLICATIONS







## MATING DATA

Quickie™ IDC receptacles

50

#### PROCESSING INFORMATION

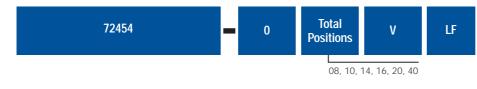
Compatible with wave, vapor-phase, and IR reflow soldering processes

## **RoHs INFORMATION**

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

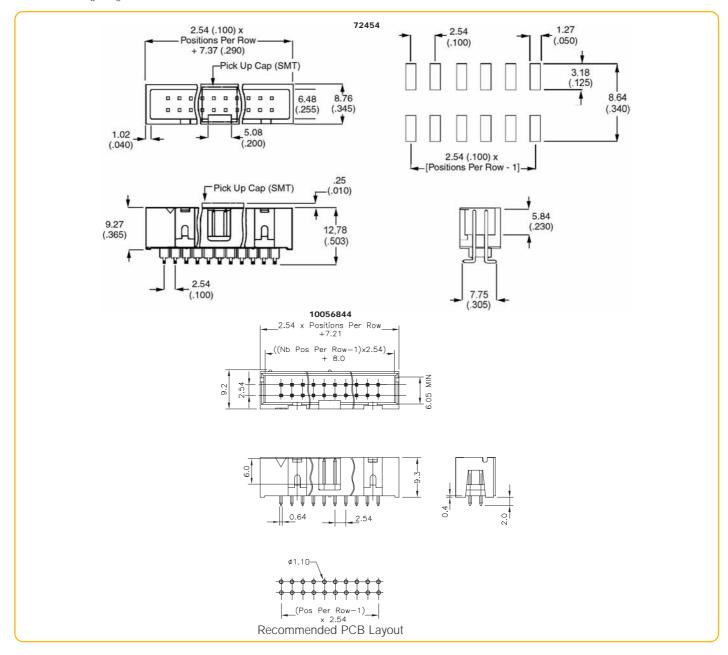
mating side

SMT (Surface Mount)



PiP (Pin-in-Paste)







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

#### TECHNICAL DATA Physical

Housing: Glass filled,



hermoplastic polyester, grey Flammability rating: UL 94 V-0

#### **Electrical Performance**

- Current rating: 3 A continuous
- lnsulation resistance: 10,000 M $\Omega$  min
- Dielectric withstanding voltage: 1500 V

Mechanical Performance Pin retention to housing: 20 N min.

Operating Temperature Range

-65°C to +125°C

#### Packaging

Tubes

#### **Reference Information**

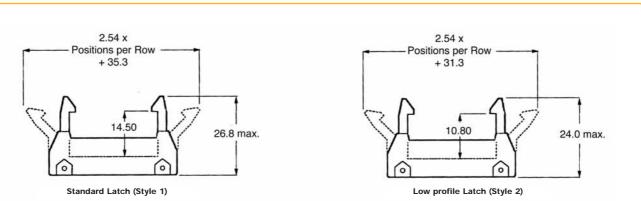
**S** File no. E66906

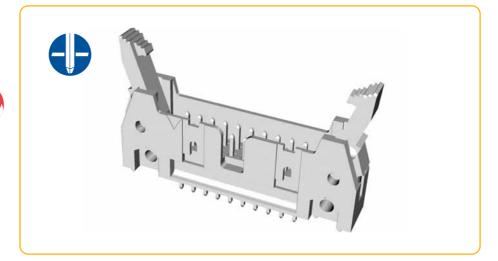
- G: File no. LR46923
- Product drawing: By 5-digit base part number

Product specification: BUS-12-082

Specifications subject to change without notice.

# LATCHING STYLES





## MATING DATA

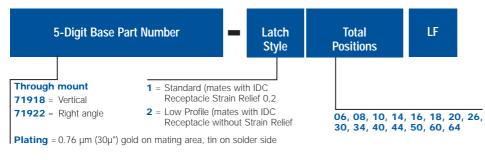
Quickie<sup>™</sup> IDC receptacles 50

## **PROCESSING INFORMATION**

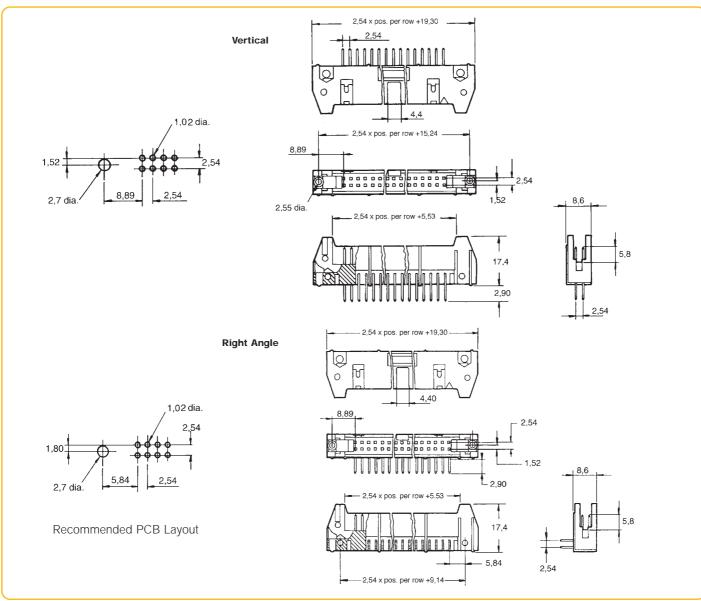
Compatible with wave soldering processes

## **RoHs INFORMATION**

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







# Quickie<sup>™</sup> IDC RECEPTACLES 2.54 mm (.100")



#### TECHNICAL DATA Physical

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

### **Electrical Performance**

- Current rating: 1 A continuous
- Insulation resistance: 50,000 M $\Omega$  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 +125°C

# Packaging

Tubes

## Reference Information

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

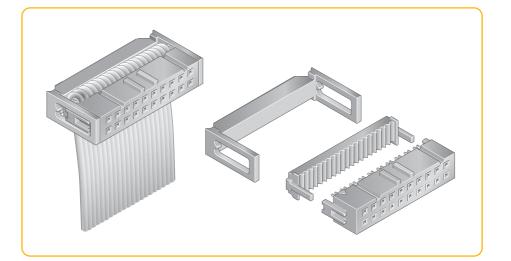
Specifications subject to change without notice.

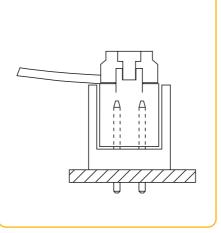
## MATING DATA

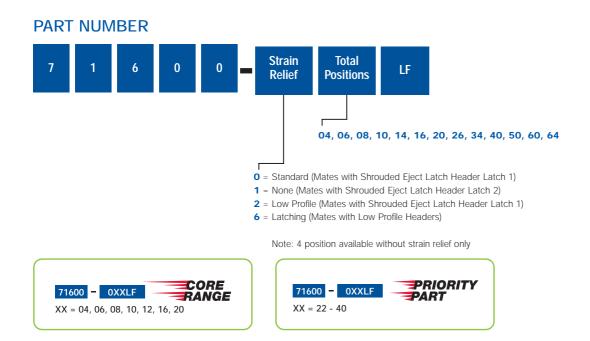
BergStik <sup>®</sup> unshrouded	
vertical headers	10, 12, 14
Quickie <sup>®</sup> shrouded	
low profile headers	44, 46
Quickie <sup>®</sup> shrouded	
eject latch headers	48

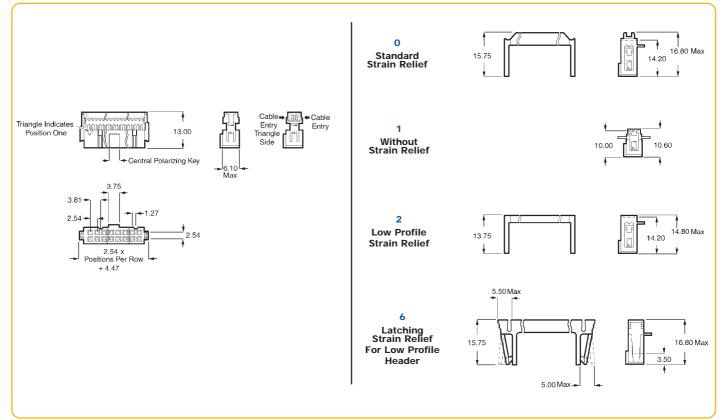
## **RoHs INFORMATION**

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









# Quickie<sup>™</sup> IDC 2-ROW PCB CONNECTORS 2.54 mm (.100")



 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: 50,000 M $\Omega$  min.
- Contact resistance: 15 m $\Omega$  max.
- Dielectric withstanding voltage: 1000 V min.

#### **Operating Temperature Range**

-65°C to +125°C

Packaging Tubes

Reference Information
File no. E66906
File no. LR46923
Product drawing: By 5-digit base part number
Product specification: 110-019
Specifications subject to change without notice.

## **PROCESSING INFORMATION**

Compatible with wave and vapor phase soldering processes — Low temperature

## **RoHs INFORMATION**

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

