

## DUBOX™ SHUNTS



### FEATURES & BENEFITS

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



## TECHNICAL INFORMATION

### MATERIALS

- Housing: High temperature, black thermoplastic
- Flammability rating: UL94V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27µm (50µin.) nickel

### ELECTRICAL PERFORMANCE

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



### ENVIRONMENTAL

- Operating temperature range: -65°C to +125°C

### MECHANICAL PERFORMANCE

- Mating cycles (durability): 50-Gold, 25-Tin
- Insertion force:
  - 450gf max. per gold contact
  - 500gf max. per tin-lead contact
- Withdrawal force:
  - 30gf min. per gold contact
  - 30gf min. per tin-lead contact
- Insertion depth:
  - 4.85 mm (.191in.) min.
  - [provides 3.81 mm (.015in.) wipe] – Low profile

### SPECIFICATIONS

-  File no. E66906
-  File no. LR46923
- Product drawing: By 5-digit base part number
- Product specification: BUS-12-071-gold  
BUS-12-070-tin

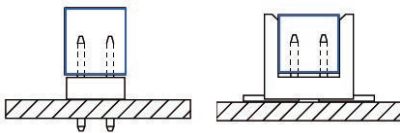
### APPROVALS AND CERTIFICATIONS

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

### PACKAGING

- Plastic bags

## TYPICAL APPLICATIONS



## PART NUMBERS

### CORE RANGE

68786 — 202LF

### LOW PROFILE

68786 — PLATING 02 LF

0.76µm (30µin.) gold	2
Tin	3

### STANDARD

63429 — PLATING 02 LF

0.76µm (30µin.) gold	2
Tin	3

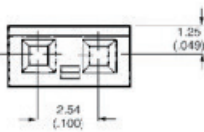
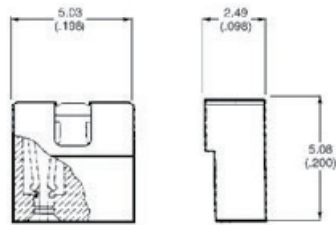
### MULTI-POSITION

69145 — PLATING NUMBER OF POSITIONS LF

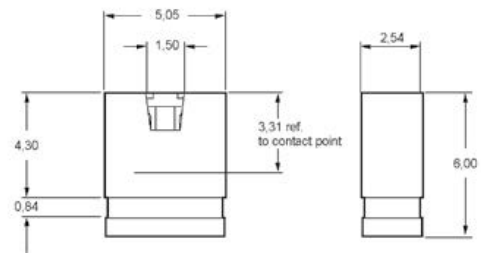
0.76µm (30µin.) gold	2
Tin	3

4 to 20 positions

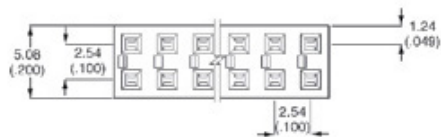
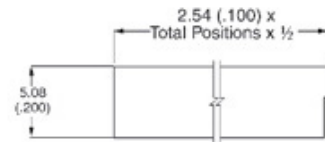
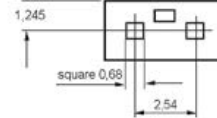
## PRODUCT



68786



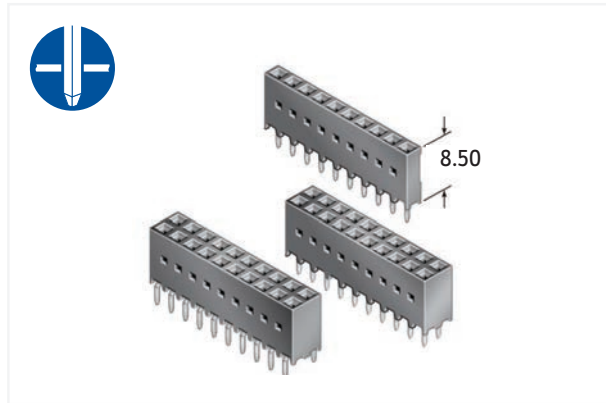
63429



69145

Dimension in mm

# DUBOX™ VERTICAL RECEPTACLES



## FEATURES & BENEFITS

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

## TECHNICAL INFORMATION

### MATERIALS

- Housing: Glass filled thermoplastic polyester, blue
- Flammability rating: UL94V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin in accordance with IEC 603-81

### ELECTRICAL PERFORMANCE

- Current rating: 3A max. per individual contact  
2A 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: 1000V RMS



### ENVIRONMENTAL

- Operating temperature range:  $-65^\circ\text{C}$  to  $+125^\circ\text{C}$

### MECHANICAL PERFORMANCE

- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150gf) max.
- Withdrawal force per gold contact: 0.30 N (30gf) min.
- Insertion depth:
  - Top entry: 3.6mm min. to 6.81mm max.  
[provides .381mm wipe]
  - Bottom entry: 7mm min.  
[provides .381mm wipe] plus board thickness

### SPECIFICATIONS

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

### APPROVALS AND CERTIFICATIONS

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

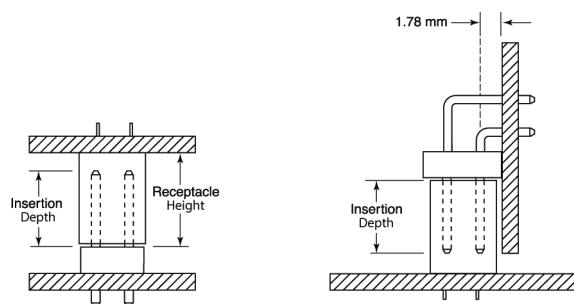
### PACKAGING

- Plastic boxes or tubes

### PROCESSING INFORMATION

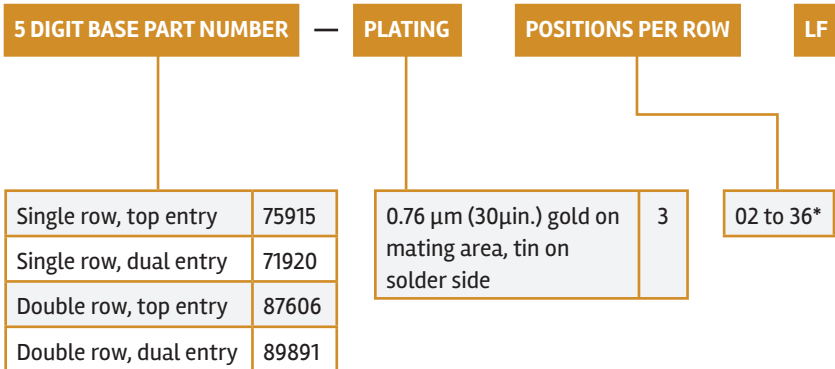
- Compatible with wave soldering processes

## TYPICAL APPLICATIONS



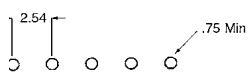


## PART NUMBERS

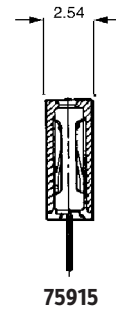
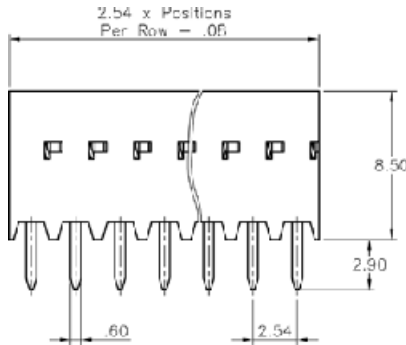


\*Other sizes available on request

## PRODUCT



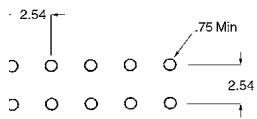
**75915**



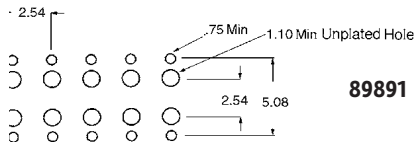
**75915**



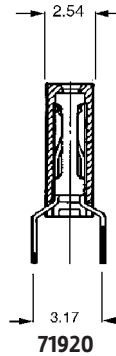
**87606**



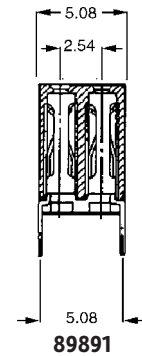
**87606**



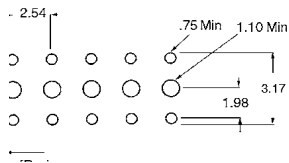
**89891**



**71920**



**89891**

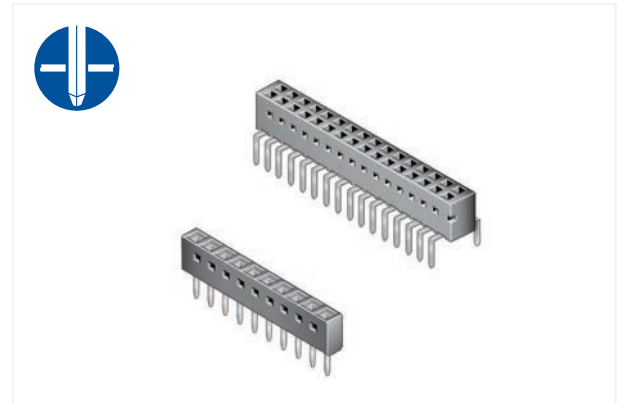


**71920**

### Recommended PCB layouts

Dimension in mm

# DUBOX™ VERTICAL RECEPTACLES LOW PROFILE



## FEATURES & BENEFITS

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

# DUBOX™ VERTICAL RECEPTACLES LOW PROFILE

## TECHNICAL INFORMATION

### MATERIALS

- Housing: Glass filled thermoplastic polyester, blue
- Flammability rating: UL94V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27µm (50µin.) nickel

### ELECTRICAL PERFORMANCE

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



### ENVIRONMENTAL

- Operating temperature range: -65°C to +125°C

### MECHANICAL PERFORMANCE

- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150gf) max.
- Withdrawal force per gold contact: 0.30 N (30gf) min.
- Insertion depth:
  - Top entry: 3.6mm min. to 6.7mm max.  
[provides .381mm wipe]
  - Bottom entry: 6mm min.  
[provides .381mm wipe] plus board thickness

### SPECIFICATIONS

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

### APPROVALS AND CERTIFICATIONS

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

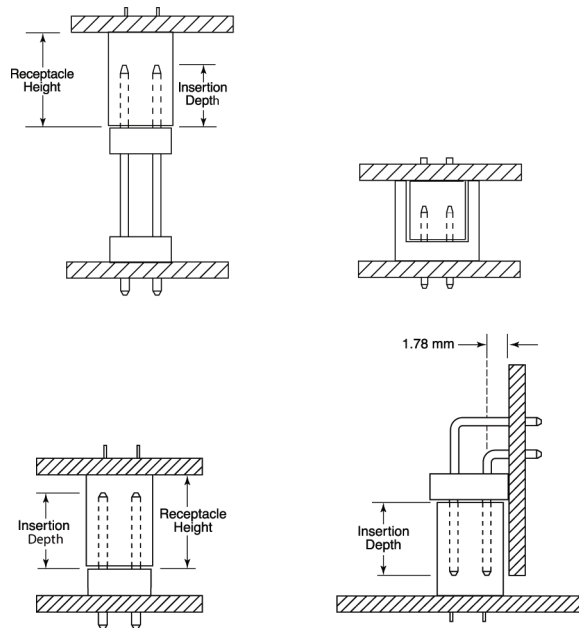
### PACKAGING

- Plastic boxes or tubes

### PROCESSING INFORMATION

- Compatible with wave soldering processes

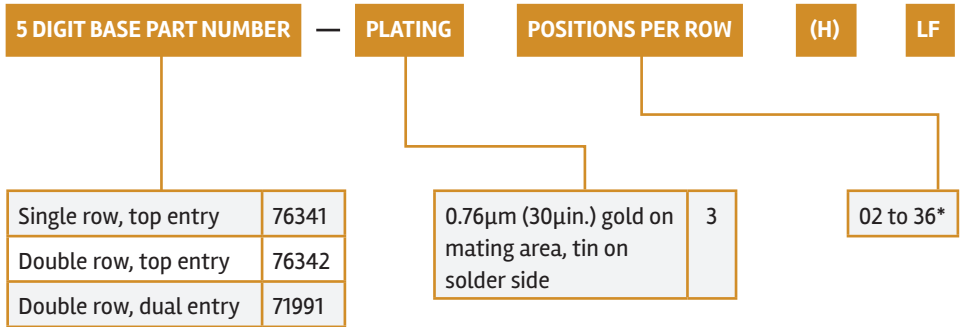
## TYPICAL APPLICATIONS





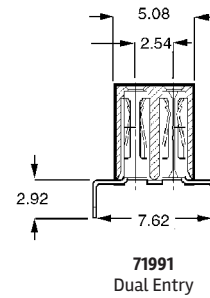
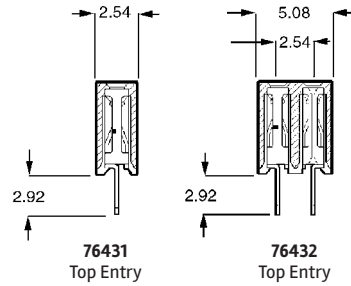
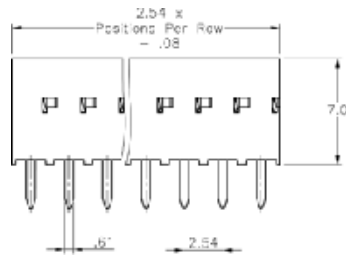
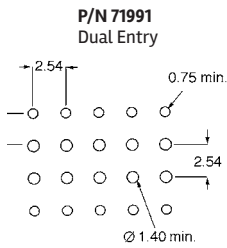
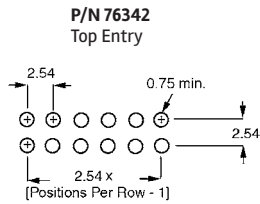
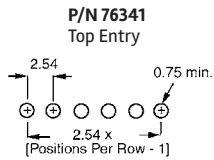
**DUBOX™ VERTICAL  
RECEPTACLES LOW PROFILE**

**PART NUMBERS**



\*Other sizes available on request

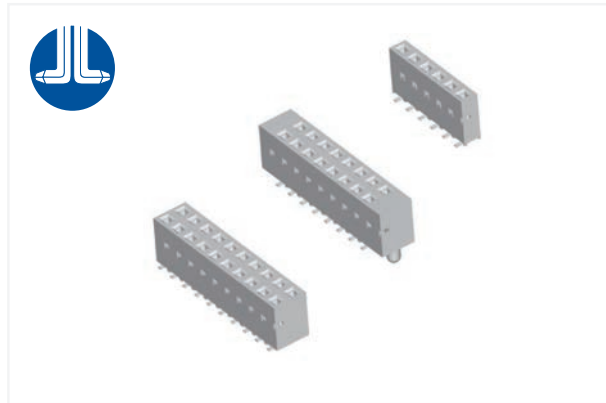
**PRODUCT**



**Recommended PCB layouts**

Dimension in mm

# DUBOX™ VERTICAL RECEPTACLES LOW PROFILE



## FEATURES & BENEFITS

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

## **DUBOX™ VERTICAL RECEPTACLES LOW PROFILE**

### **TECHNICAL INFORMATION**

#### **MATERIALS**

- Housing: High temperature body, grey
- Flammability rating: UL94V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27µm (50µin.) nickel

#### **ELECTRICAL PERFORMANCE**

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

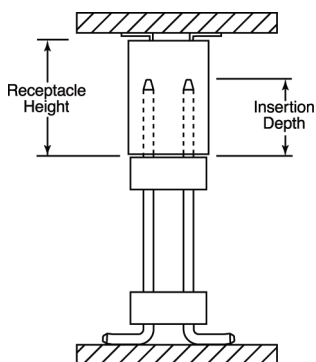
#### **ENVIRONMENTAL**

- Operating temperature range: -65°C to +125°C



#### **MECHANICAL PERFORMANCE**

- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150gf) max
- Withdrawal force per gold contact: 0.30 N (30gf) min
- Insertion depth:
  - Top entry: 3.6mm min. to 6.7mm max.  
[provides .381mm wipe]
  - Bottom entry: 6mm min.  
[provides .381mm wipe] plus board thickness

### **TYPICAL APPLICATIONS**



#### **SPECIFICATIONS**

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

#### **APPROVALS AND CERTIFICATIONS**

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

#### **PACKAGING**

- Plastic boxes or tubes
- Tape-and-reel as available

#### **PROCESSING INFORMATION**

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

# DUBOX™ VERTICAL RECEPTACLES LOW PROFILE

## PART NUMBERS

### CORE RANGE

89898 — 3XXALF

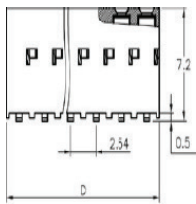
XX = 02, 03, 04, 05, 06, 08, 10

5 DIGIT BASE PART NUMBER	PLATING	POSITIONS PER ROW	OPTION	LF	
Single row, dual entry	91601	02 to 25	Single row	Standard-tubes	-
Single row, with external locating pegs, dual entry	91614	02 to 25	Double row	Tape-and-reel packaging with pick-up cap*	A
Double row, dual entry	89898	0.76µm (30µin.) gold on mating area, tin on solder side		3	
Double row with external locating pegs, dual entry	91615				
Double row with internal locating pegs, dual entry	91618				

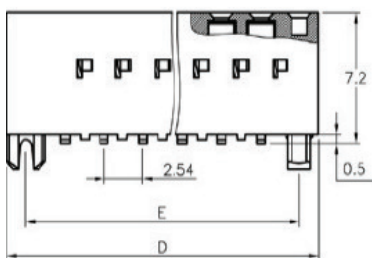
\*as available

## PRODUCT

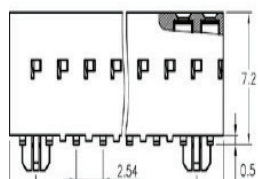
### STANDARD



### EXTERNAL LOCATING PEGS

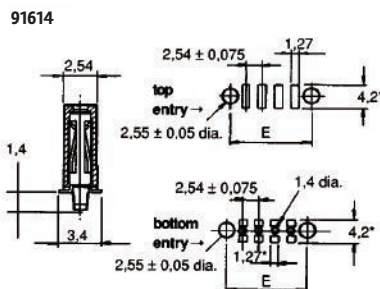
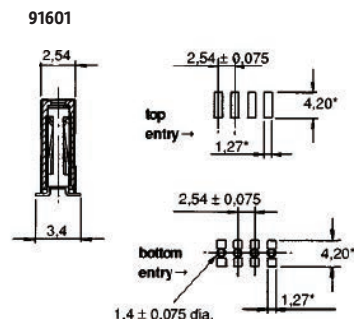


### INTERNAL LOCATING PEGS



Dimension in mm

### SINGLE ROW + PAD LAYOUTS

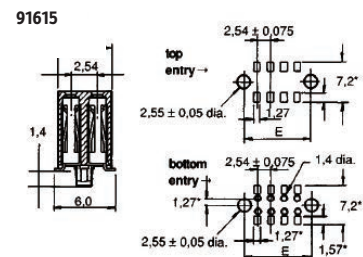
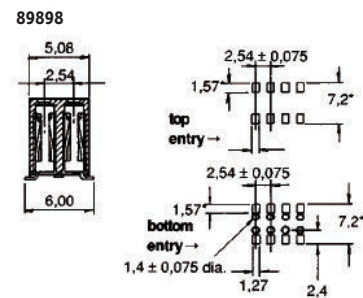


\*Note: Available as of 3 positions versions

Not available in single row

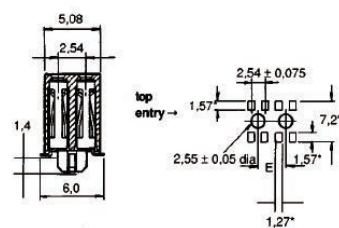
Note: All dimensions marked with \* are minimum dimensions

### DOUBLE ROW + PAD LAYOUTS



\*Note: Available as of 3 positions versions

91618



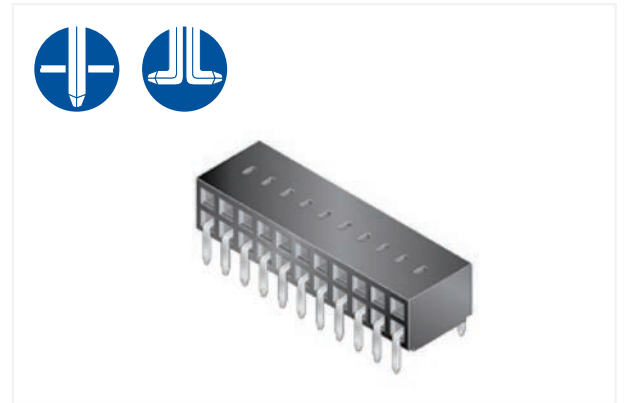
\*Note: available as of 6 number of positions

For more information, please contact: [Communications@fci.com](mailto:Communications@fci.com) or visit us at [www.fci.com](http://www.fci.com)

#### Disclaimer

Please note that the above information is subject to change without notice.

## DUBOX™ HORIZONTAL RECEPTACLES



### FEATURES & BENEFITS

- 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 INFORMATION

### MATERIALS

- Housing:
  - Blue thermoplastic –Through hole
  - High temp. grey thermoplastic – Surface mount
- Flammability rating: UL94V-0
- Pin: Phosphor-bronze
- Plating: Gold or tin over 1.27µm (50 µin.) nickel

### ELECTRICAL PERFORMANCE

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

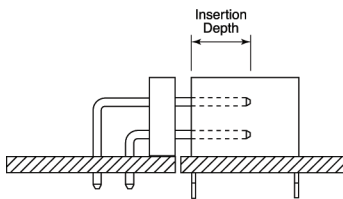
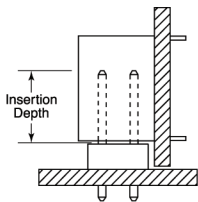
### ENVIRONMENTAL

- Operating temperature range: -65°C to +125°C



### MECHANICAL PERFORMANCE

- Mating cycles (durability): 200
- Insertion force per gold contact: 1.50 N (150gf) max.
- Withdrawal force per gold contact: 0.30 N (30gf) min.
- Insertion depth:
  - 3.6mm min. to 7.50mm max.
  - [provides .381mm wipe]

## TYPICAL APPLICATIONS



### SPECIFICATIONS

-  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

### APPROVALS AND CERTIFICATIONS

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

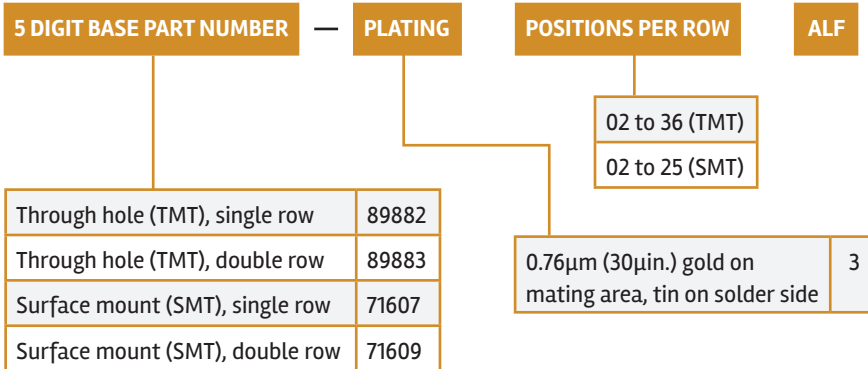
### PACKAGING

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

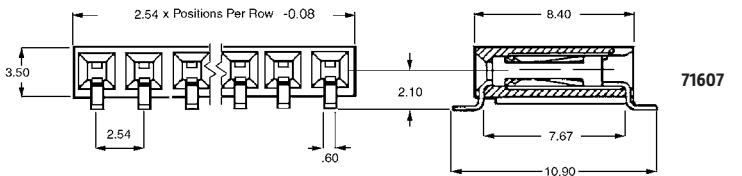
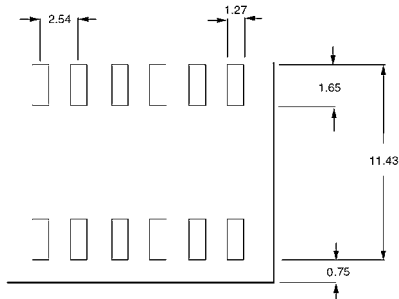
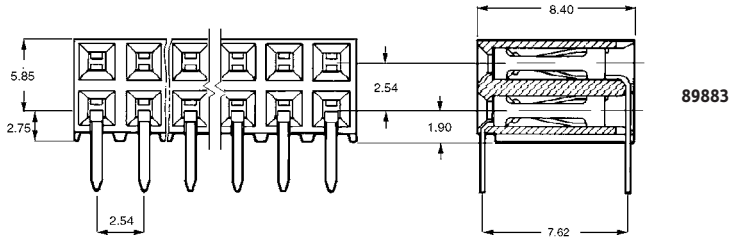
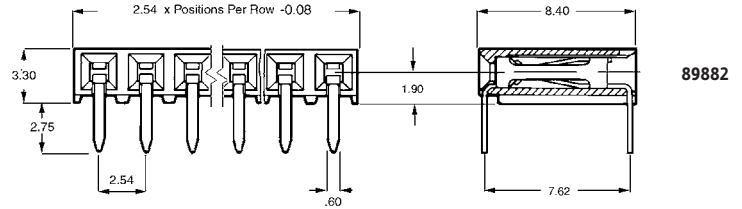
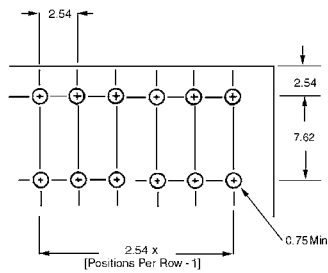
### PROCESSING INFORMATION

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

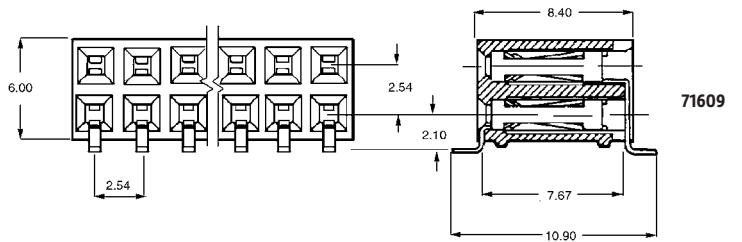
## PART NUMBERS



## PRODUCT



### Recommended PCB layouts



Dimension in mm

# DUBOX™ SHROUDED HEADERS



## FEATURES & BENEFITS

- 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 INFORMATION

### MATERIALS

- Housing: Glass filled thermoplastic polyester
- Housing color for series 76382, 76383: blue  
Housing color for series 76384, 76385: black
- Flammability rating: UL94V-0
- Contact: Copper alloy
- Plating: Gold or tin over 1.27µm (50µin.) nickel

### ELECTRICAL PERFORMANCE

- Current rating: 3A continuous
- Insulation resistance:  $1 \times 10^5 \text{M}\Omega$  min.
- Dielectric withstanding voltage: 1000V RMS

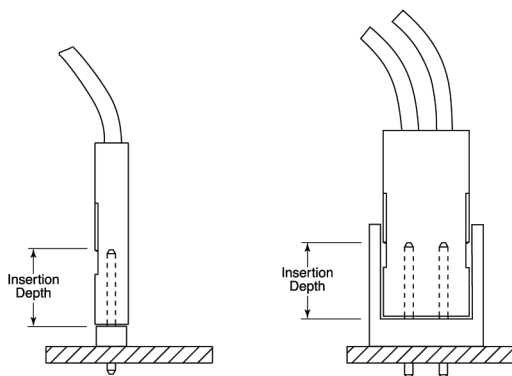
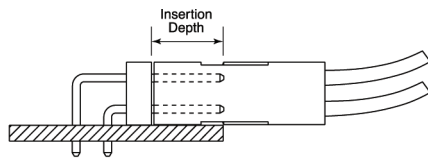
### ENVIRONMENTAL

- Operating temperature range:  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$



### MECHANICAL PERFORMANCE

- Contact retention to housing: 20 N min.

## TYPICAL APPLICATIONS



### SPECIFICATIONS

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

### APPROVALS AND CERTIFICATIONS

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

### PACKAGING

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

### PROCESSING INFORMATION

- Compatible with wave soldering processes

## PART NUMBERS

**5 DIGIT BASE PART NUMBER**

**PLATING**

**POSITIONS PER ROW**

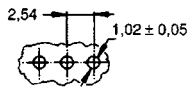
**LF**

Single row, straight	76384
Single row, right angle	76382
Double row, straight	76385
Double row, right angle	76383

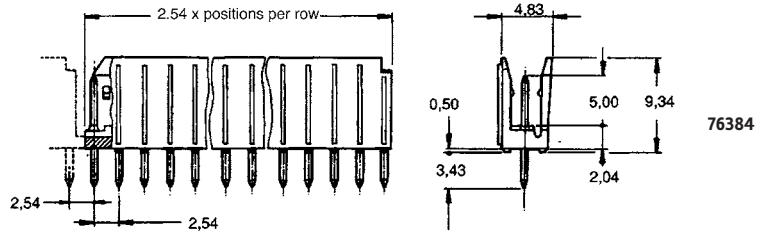
02 up to 18

0.76µm (30µin.) gold/GXT on mating area, tin on solder side	3
Tin	4

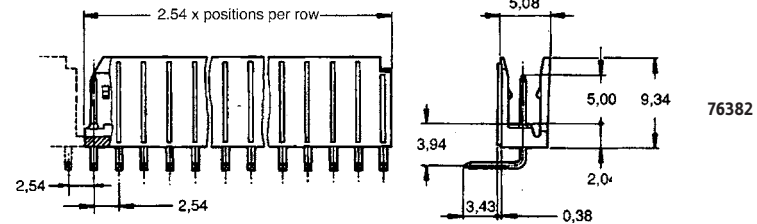
## PRODUCT



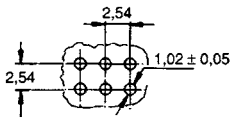
Recommended PCB Layouts



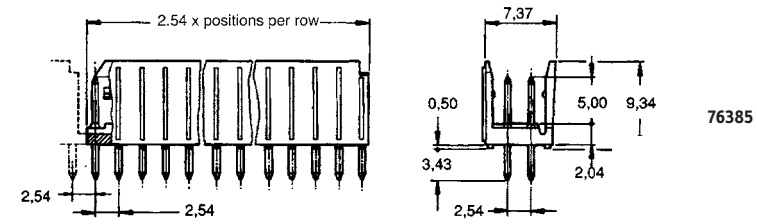
76384



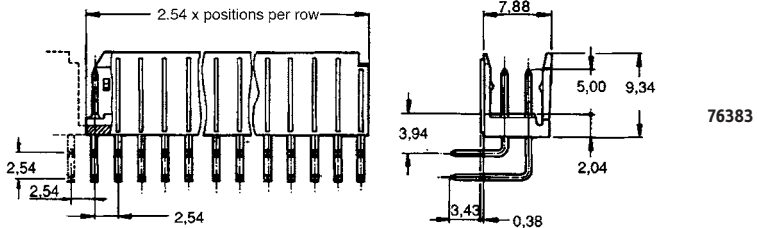
76382



Recommended PCB Layouts



76385



76383

Dimension in mm

## DUBOX™ CRIMP-TO-WIRE-CONTACTS



### FEATURES & BENEFITS

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



## TECHNICAL INFORMATION

### MATERIALS

- Contact: Phosphor-bronze
- Plating: 0.76µm (30µin.) Gold over 1.27µm (50µin.) nickel

### ELECTRICAL PERFORMANCE

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



### ENVIRONMENTAL

- Operating temperature range: -65°C to +125°C

### 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
- Insertion depth:
  - Discrete wire: 3.6mm min. to 5.6mm max. [provides .381 mm wipe]
  - Crimp-to-wire housing: 5.1mm min. to 6.2mm max. [provides .381mm wipe in housing]

### SPECIFICATIONS

-  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

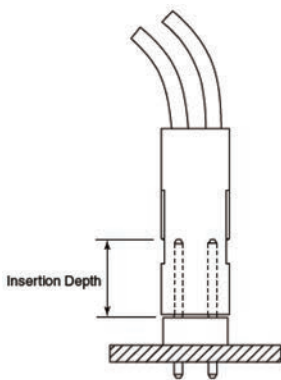
### APPROVALS AND CERTIFICATIONS

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

### PACKAGING

- 1 Reels
- Boxes – Loose piece

## TYPICAL APPLICATIONS



## PART NUMBERS

### CORE RANGE

76347 — 301LF

### PART NUMBERS / CONTACTS ON REEL

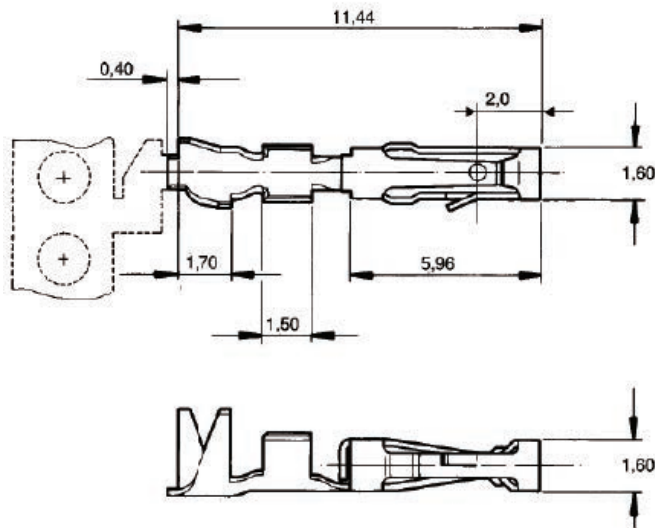
Wire Size	Insulation O.D.	Selective Gold Plated	Tin Plated	Packaging
22-30	0.90 - 1.50	76347-301LF	76347-401LF	15.000/reel
22-30	0.90 - 1.50	76347-302LF•	76347-402LF•	15.000/reel
22-30	0.90 - 1.50	76347-303LF	76347-403LF	500/reel
20-22	1.10 - 1.60	76347-311LF	76347-411LF	15.000/reel
20-22	1.10 - 1.60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

• : 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 mm  
 Mating pin size = 0,62 mm square  
 Mating pin recommended length = 5,00 mm min.

# DUBOX™ CRIMP-TO-WIRE-HOUSINGS



## FEATURES & BENEFITS

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



## TECHNICAL INFORMATION

### MATERIALS

- Housing: Glass filled thermoplastic polyester
- Housing color: Blue
- Flammability rating: UL94V-0

### ELECTRICAL PERFORMANCE

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



### ENVIRONMENTAL

- Operating temperature range:  $-65^\circ\text{C}$  to  $+125^\circ\text{C}$

### MECHANICAL PERFORMANCE

- Insertion depth:
  - 3.6mm min. to 6.0mm max.

### SPECIFICATIONS

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

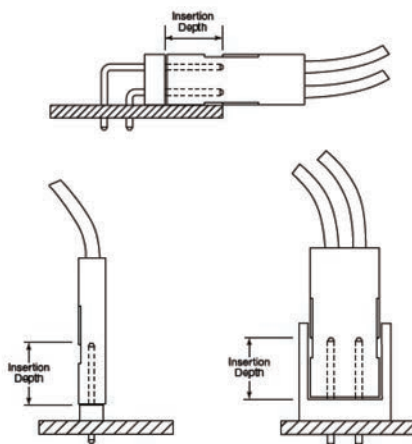
### APPROVALS AND CERTIFICATIONS

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

### PACKAGING

- Bulk

## TYPICAL APPLICATIONS





## PART NUMBERS

### CORE RANGE

76347 — 301LF

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

76347 — 301LF

XX = 04, 06, 08, 10, 12, 16, 30

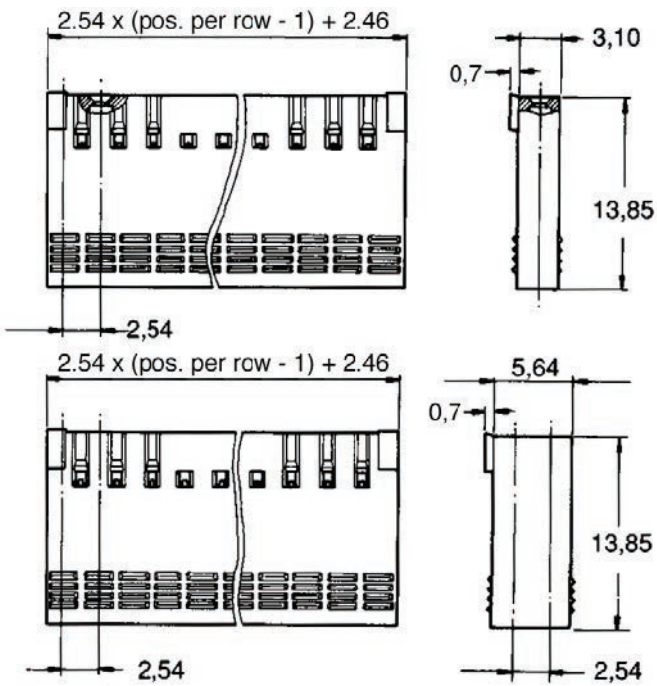
5 DIGIT BASE PART NUMBER — 0

POSITIONS PER ROW — LF

Single row	65240
Double row	65239

02 up to 36

## PRODUCT



Pin size: 0.62mm square  
Recommended pin length: 5.00mm min.

BWBDUBOX254081BEA4



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Board to Board & Mezzanine Connectors](#) category:*

*Click to view products by [Amphenol](#) manufacturer:*

Other Similar products are found below :

[589158040000018](#) [MDF7C-18P-2.54DSA\(55\)](#) [FCN-230C068-11](#) [FCN-268F012-G/BD](#) [FCN-268F036-G/BD](#) [FCN-268M012-G/0D](#) [FCN-268M024-G/1D](#) [FCN-723J004/1](#) [MIS-048-01-F-D-DP-K](#) [832-10-034-10-001000](#) [FX4C-80S-1.27DSA](#) [FCN-214Q030-G/0](#) [FCN-234P048-G/0](#) [FCN-235D050-G/C](#) [210-93-314-41-105000](#) [2-22603-0](#) [MDF7-40DP-2.54DSA\(55\)](#) [AXG720047](#) [MIT-114-03-F-D-K](#) [55323-1519](#) [DF33-2P-3.3DSA\(24\)](#) [YFT-20-05-H-03-SB-K](#) [503308-3040](#) [026-6203-PDB](#) [027-6203-PDB](#) [069159702701000](#) [10123981-102LF](#) [101A10019X](#) [55650-0588-C](#) [68682-310LF](#) [68684-306](#) [75140-7012](#) [87471-650](#) [YTW-30-07-H-Q-410-140](#) [FCN-268F024-G0D](#) [10124054-515LF](#) [68685-603](#) [8-1616154-3](#) [MIS-019-01-F-D](#) [FCN-268M024-G/3D](#) [FCN-268M036-G/BD](#) [20021832-06016C1LF](#) [KX15-20KLDL-E1000E](#) [AXE810124](#) [FCN-214J100-G/0](#) [FCN-230C068-E/S](#) [AXE812124](#) [AXE816124](#) [AXE720127](#) [354184](#)