

January 2003

FFC / FPC / CIC Connectors



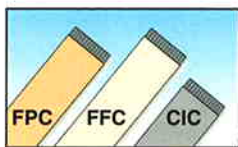
A
FCI

Introduction

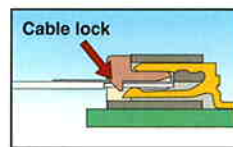
Created in 1989, FCI - an Areva Group company - rapidly secured its place among the world's top three manufacturers of connectors and interconnect systems. With a turnover of 1.8 billion dollars in 2001, FCI currently operates in 29 countries where it covers the following markets: communications, data, consumer, industrial, military, aerospace and electrical power interconnect. The company employs 16,000 staff worldwide.

For more information, visit the website at www.fciconnect.com

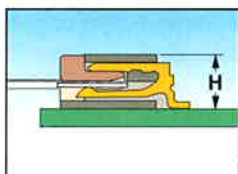
Selection Innovation Reliability Economy



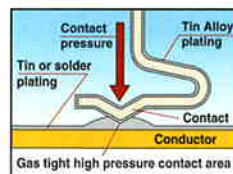
Circuitry and cable
Flexible Printed Circuit (FPC)
Flexible Flat Cable (FFC)
Conductive Ink Circuitry (CIC)



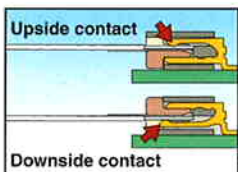
Cable Lock alignment system
Ensures proper alignment during mating and prevents unintentional cable release



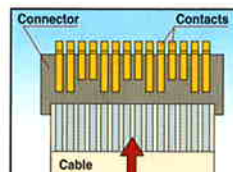
Low profile body heights
Permit low PCB clearance



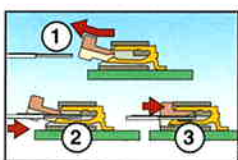
Gas Tight High pressure (GTH) contact system
Provides highly-reliable contact performance



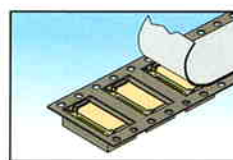
Upper or lower contact orientation
Provides design flexibility



Low Insertion Force (LIF)
Special contact arrangement provides reliable and easy mating operation



Zero Insertion Force (ZIF)
Allows easy cable insertion (cable is pre-held by slider) for a reliable connection



Embossed Tape-and-Reel packaging
Supports automated PCB assembly process

www.fciconnect.com/flex

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0.30 mm spacing page

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0.50 mm spacing

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1.00 mm spacing

SFW Series	12
HFW Series	14
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HLW Series	18

2.54 mm spacing

DUFLEX Series	20
CLINCHER Series	22

GENERAL

Circuitry lay-outs	24-29
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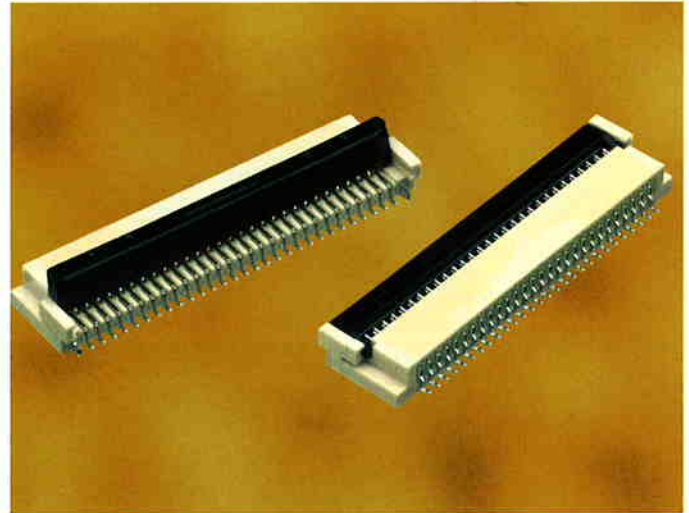
62789 series - ZIF / SMT



0.30 mm Spacing for FPC

Features

- Available in 41, 51, 57, 67 positions
- Right angle
- Excellent cable retention with small size slider



Benefits

- Low profile of 2.00 mm
- Flip-Top cover rotates back 100 degrees for easy cable positioning.
- Staggered PCB layout enables space savings and easy soldering.
- The Zero Insertion Force (ZIF) connection allows an increased number of mating cycles with minimal wear.
- The ZIF pre-holding process provides a stable and reliable mating operation.

Technical Data

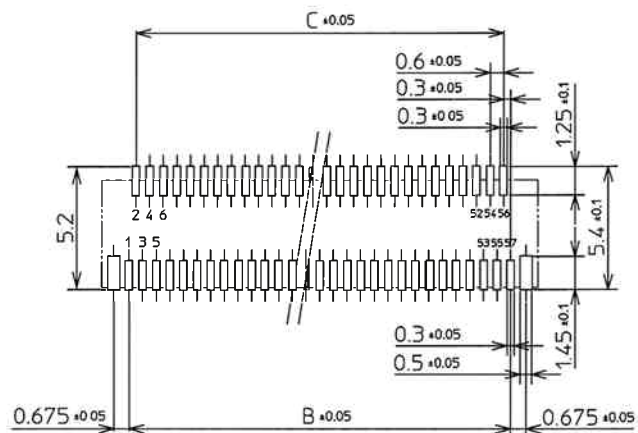
PC Board pattern (component side)

Material

- Housing** : Thermoplastic Resin, White
- Slider** : Thermoplastic Resin, Black
- Contact** : Phosphor Bronze, Tin alloy plated

Dimensions

- B** = 0.30 x total number of positions - 0.30
- C** = 0.30 x total number of positions - 0.90



RECOMMENDED P.C.BOARD
(PARTS MOUNTING SIDE)

62789 series - ZIF / SMT



0.30 mm Spacing for FPC

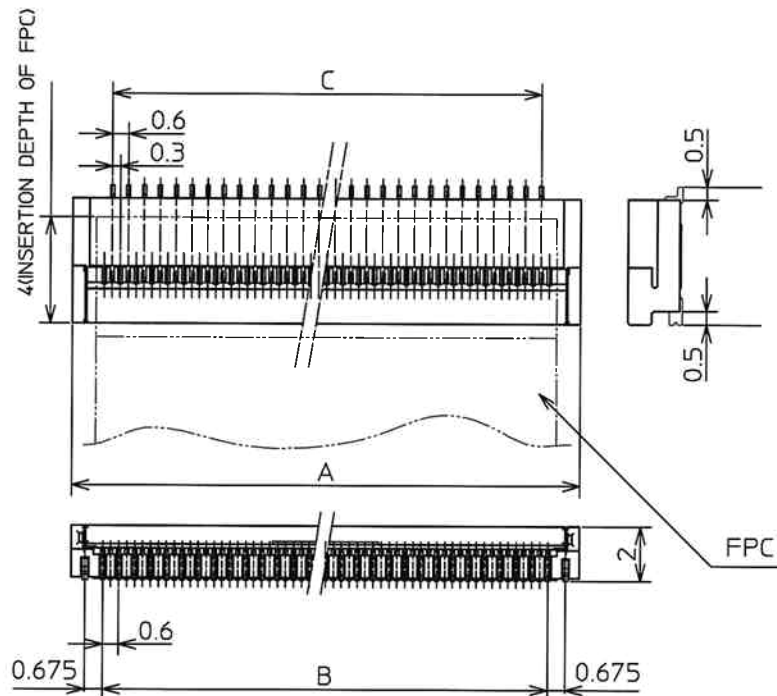
Ordering Data

Series 62789 - Positions 1100

Number of contacts 41, 51, 57, 67
(for other number of positions, please contact FCI)

Packaging Tape and reel : 3000 pcs.

Dimensions



Dimensions
$A = 0.30 \times \text{total number of positions} + 2.10$
$B = 0.30 \times \text{total number of positions} - 0.30$
$C = 0.30 \times \text{total number of positions} - 0.90$

Circuitry Type For Recommended Circuitry type see page 25

62674 series - ZIF / SMT



0.50 mm Spacing for FFC / FPC

Features

- Available in 8, 12, 16, 20, 23, 25, 30, 33 positions
- Vertical
- Excellent cable retention with small size slider
- Cable lock option



Benefits

- The Gas-Tight, High pressure (GTH) contact system ensures a low cost connection with reliability equal to gold plating.
- The Zero Insertion Force (ZIF) connection allows an increased number of mating cycles with minimal wear.
- The ZIF pre-holding process provides a stable and reliable mating operation.
- The slider ensures maximum cable retention with a minimum size.
- Fork shaped contacts mean stable and low contact resistance.
- The cable lock option provides cable strain relief as well as full retention of cable.

Technical Data

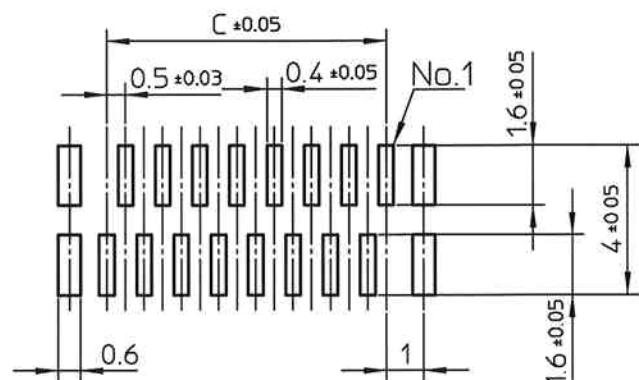
PC Board pattern (component side)

Material

- Housing** : Resin, glass reinforced, UL94V-0, Black
- Slider** : Resin, glass reinforced, UL94V-0, Brown (with cable-lock : Black)
- Contact** : Phosphor Bronze, Tin alloy plated

Dimensions

$C = 0.50 \times \text{total number of positions} - 0.50$



62674 series - ZIF / SMT



0.50 mm Spacing for FFC / FPC

Ordering Data

Series 62674 - Positions 11 2 1

Number of contacts

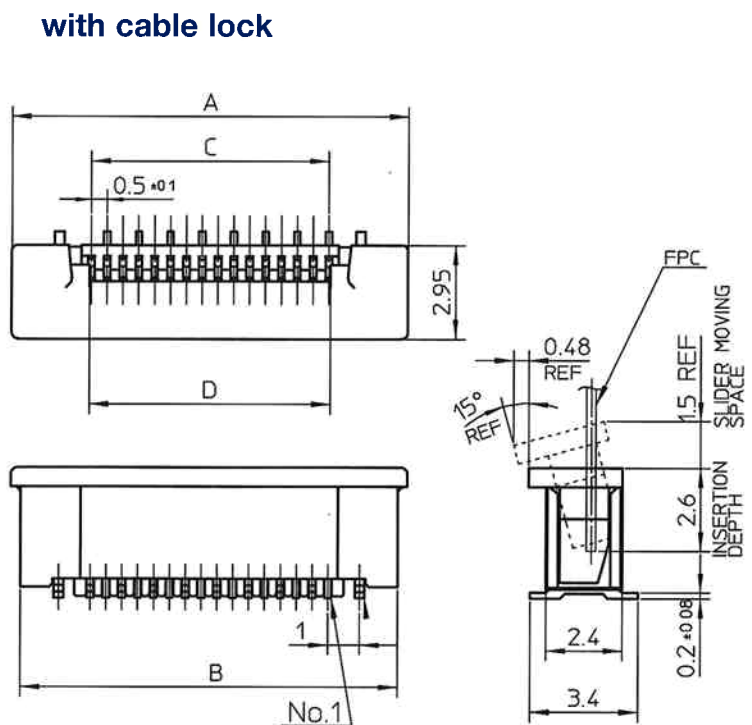
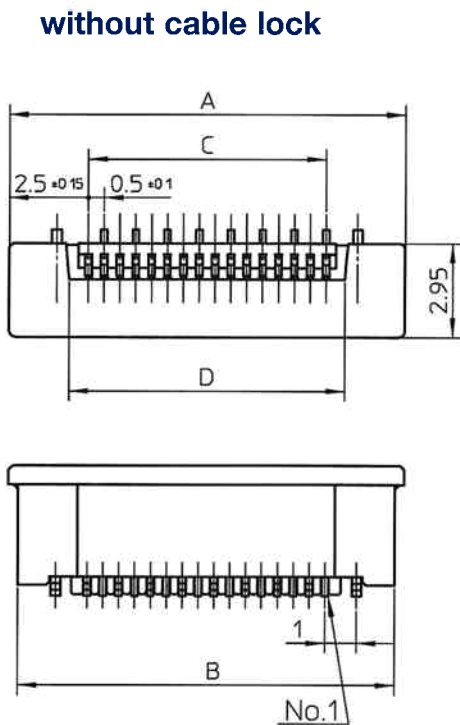
8, 12, 16, 20, 23, 25, 30, 33

(for other number of positions, please contact FCI)

Cable lock 2 = without cable lock

Dimensions

Packaging Tape and reel : 1000 pcs.



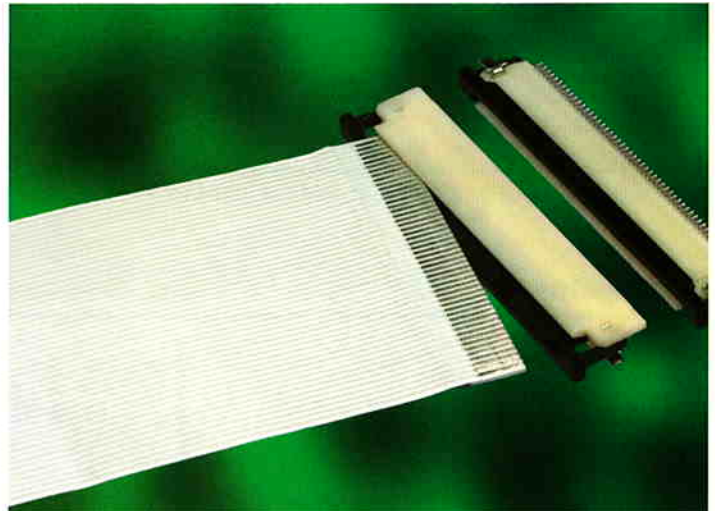
Dimensions		
A	= 0.50 x total number of positions + 4.50	±0.20
B	= 0.50 x total number of positions + 3.90	±0.20
C	= 0.50 x total number of positions - 0.50	±0.10
D (with cable lock)	= 0.50 x total number of positions - 0.40	±0.10
D (without cable lock)	= 0.50 x total number of positions + 0.70	±0.10

Circuitry Type For Recommended Circuitry type see page 25

0.50 mm Spacing for FPC / FPC

Features

- Available positions
 - Upside contacts 32, 34, 36, 40, 43, 45, 50
 - Downside contacts 40, 45, 50
- Right angle
- Excellent cable retention with small size slider



Benefits

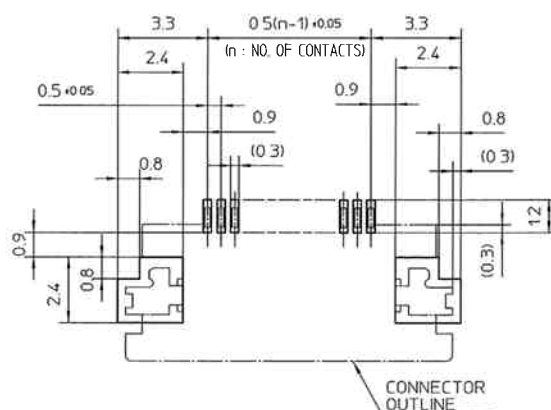
- The Gas-Tight, High pressure (GTH) contact system ensures a low cost connection with reliability equal to gold plating.
- The Zero Insertion Force (ZIF) connection allows an increased number of mating cycles with minimal wear.
- The ZIF pre-holding process provides a stable and reliable mating operation.
- The slider ensures maximum cable retention with a minimum size.
- Fork shaped contacts mean stable and low contact resistance.

Technical Data

PC Board pattern (component side)

Material

- Housing** : Glass filled thermoplastic, UL94V-0, Beige
- Slider** : Glass filled thermoplastic, UL94V-0, Black
- Contact** : Phosphor Bronze, Tin alloy plated



62684 series - ZIF / SMT



0.50 mm Spacing for FPC / FPC

Ordering Data

Series 62684 - Positions 2 10 0

Number of contacts

32, 34, 36, 40, 43, 45, 50

(for other number of positions, please contact FCI)

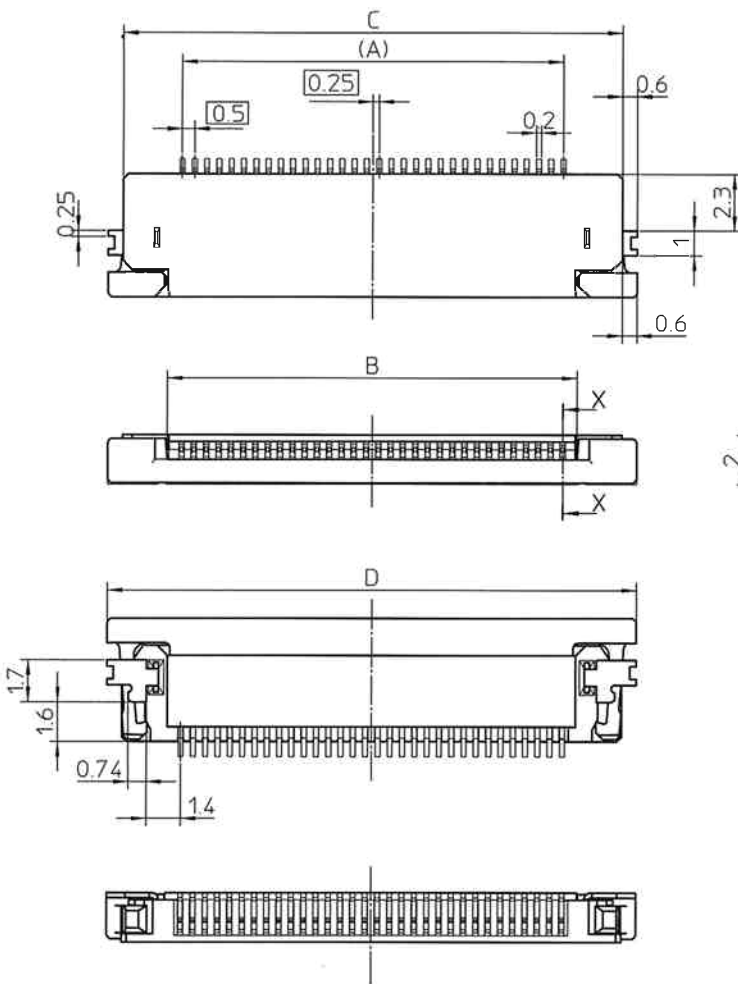
Packaging

Tape and reel : 2000 pcs.

Terminal type 1 = downside contact

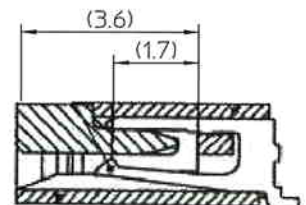
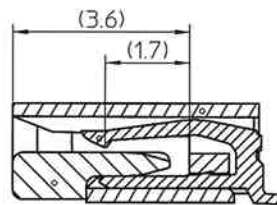
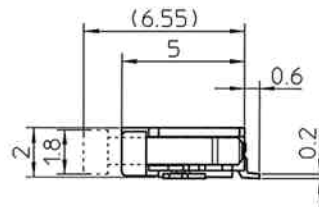
2 = upside contact

Dimensions



Dimensions

A	$0.50 \times \text{total number of positions} - 0.50$
B	$0.50 \times \text{total number of positions} + 0.65$
C	$0.50 \times \text{total number of positions} + 4.30$
D	$0.50 \times \text{total number of positions} + 5.50$



upside contact

downside contact

SECTION X-X

Circuitry Type For Recommended Circuitry type see page 26