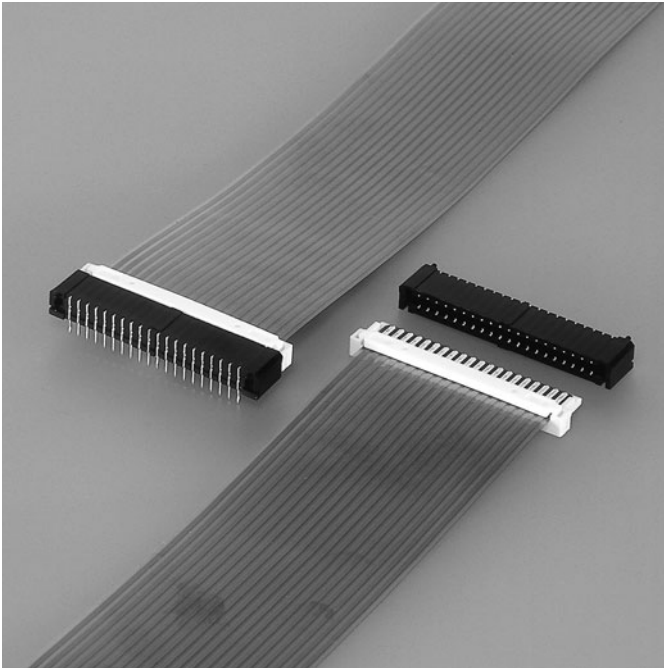


# FEL CONNECTOR

Connectors for FPC and FFC



## Features

### ●The FEL connector passed various types of durability tests for automobile

High contact force ensures contact reliability and allows stability of performance in various applications.

### ●Secure mating process

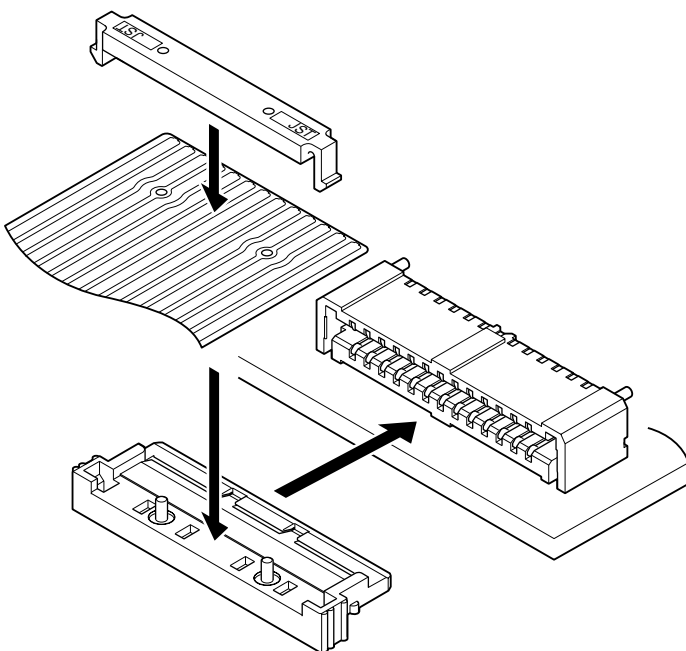
A FPC is fixed by a plug housing and a retainer and then mated to a male connector.

It prevents problems such as inverse, incomplete insertion, which occur in the conventional ZIF type connector.

### ●Multi-entry type

In addition to top entry type, side normal type whose FPC is positioned with its mating surface facing upward and side reverse type whose FPC is positioned with its mating surface facing down are available for mounting designs.

The FEL connector is 2.0mm pitch FPC connector suitable for environments in automotive compartment. The FEL connector is different from the conventional ZIF type connector, reliable connection is greatly improved by using a general housing lock for an automotive connector.



## Specifications

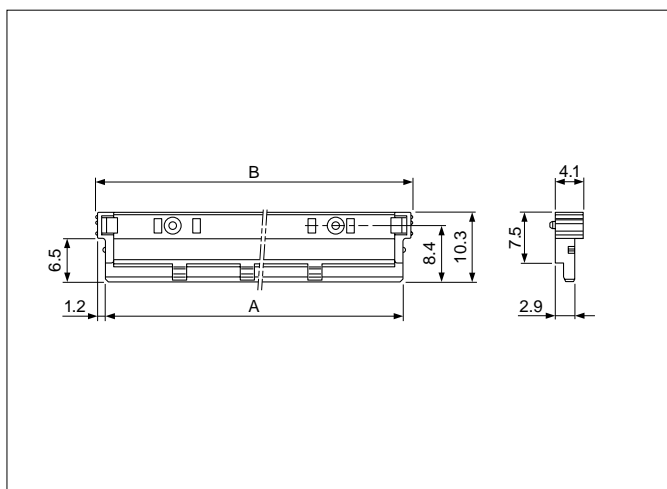
- Current rating: 0.6 to 1.5A AC, DC  
(When specific FPC pattern is used.)
- Voltage rating: 200V AC, DC
- Temperature range: -40°C to +90°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10mΩ max.  
After environmental testing/50mΩ max.
- Insulation resistance: 100MΩ min.
- Withstanding voltage: 1,000V AC/minute
- Applicable FPC: Lead pitch/2.0mm  
Lead width/1.2mm  
Mating part thickness/0.14±0.02mm
- Applicable PC board: Thickness/1.6mm  
Hole size/0.8±0.1mm (Through-hole)

\* Compliant with ELV/RoHS.

\* Contact JST for details.

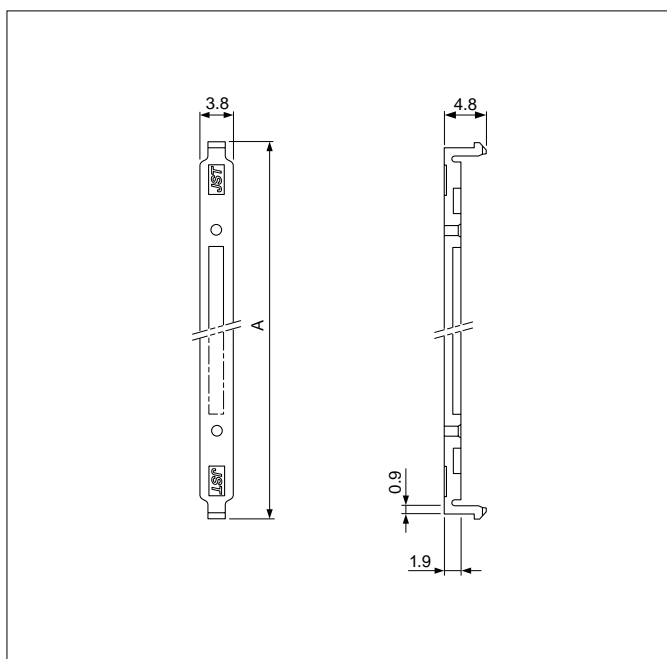
SQW  
SQF  
SQSK  
SHUNT RING  
FEL  
FMT  
FOX  
CN  
EA1  
BIC  
WPZ  
ASG  
HCC  
WIC  
ATSS  
SAC  
JUNCTION BOX  
INDEX

## Plug housing



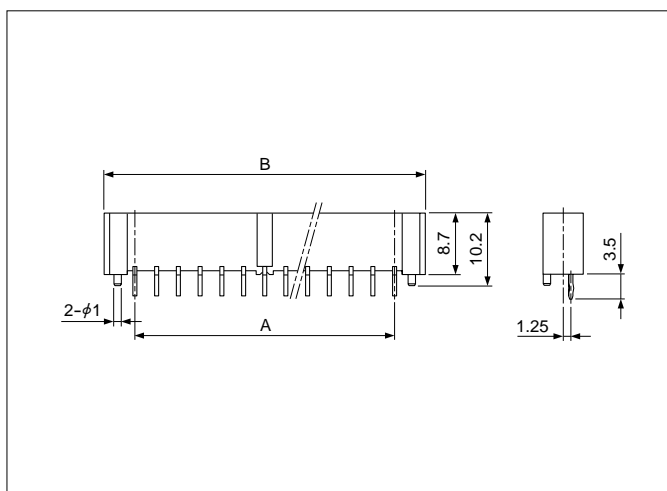
Circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
8	<b>FEL2P-8BG</b>	20	23	400
13	<b>FEL2P-13BG</b>	30	33	250
20	<b>FEL2P-20BG</b>	44	47	200
Material				
Glass-filled PPS, ivory				

## Retainer



Circuits	Model No.	Dimensions (mm)	Q'ty/bag
		A	
8	<b>FEL2R-8BG</b>	19.5	800
13	<b>FEL2R-13BG</b>	29.5	500
20	<b>FEL2R-20BG</b>	43.5	400
Material			
Glass-filled PBT, natural (white)			

## Header Top entry type



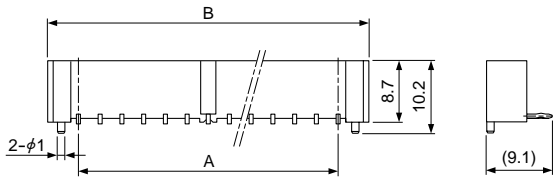
Circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
8	<b>8FEL2-BTN</b>	14	23	720
13	<b>13FEL2-BTN</b>	24	33	504
20	<b>20FEL2-BTN</b>	38	47	360
Material and Finish				
Terminal: Phosphor bronze, copper-undercoated, tin-plated Housing: Glass-filled PA 6T, black				

# FELCONNECTOR

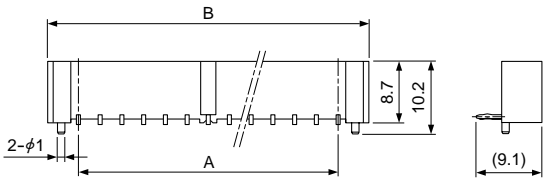
Connectors for FPC and FFC

## Header Side entry type

### Normal type



### Reverse type



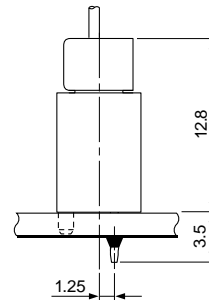
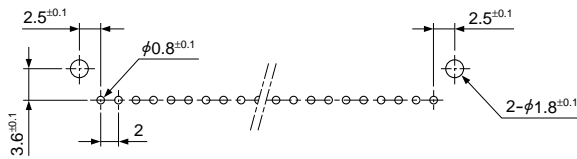
Circuits	Model No.		Dimensions (mm)		Q'ty/bag
	Normal type	Reverse type	A	B	
8	8FEL2-STN	8FEL2-SRTN	14	23	320
13	13FEL2-STN	13FEL2-SRTN	24	33	224
20	20FEL3-STN	20FEL3-SRTN	38	47	160

#### Material and Finish

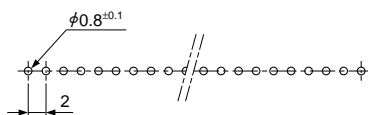
Terminal: Phosphor bronze, copper-undercoated, tin-plated  
Housing: Glass-filled PA 6T, black

## PC board layout, Assembly layout

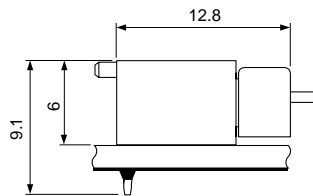
### Top entry type



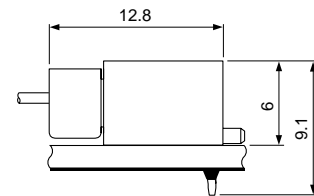
### Side entry type



#### • Normal type

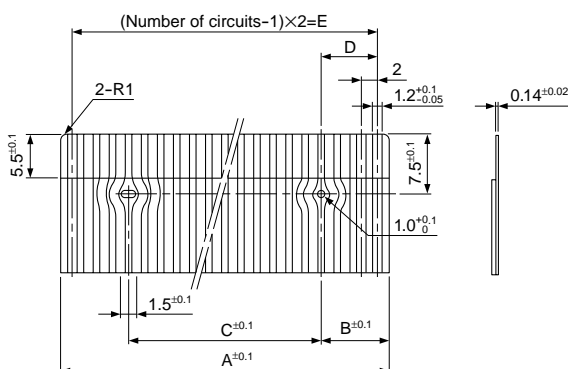


#### • Reverse type



Note: 1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.  
2. Hole dimensions differ according to the type of PC board and piercing method.  
The dimensions above should serve as guideline. Contact JST for details.

## Lead section dimensions of FPC



Circuits	Dimensions (mm)				
	A	B	C	D	E
8	17	4.5	8	3	14
13	27	6.5	14	5	24
20	41	8.5	24	7	38