

# FMT CONNECTOR

Connectors for FPC and FFC

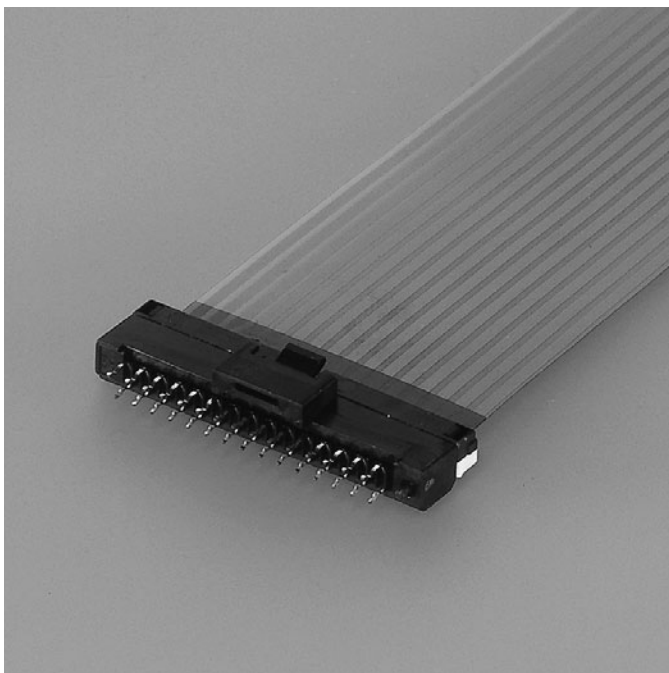
## Features

### ● Secure mating process

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

### ● Improvement of contact reliability

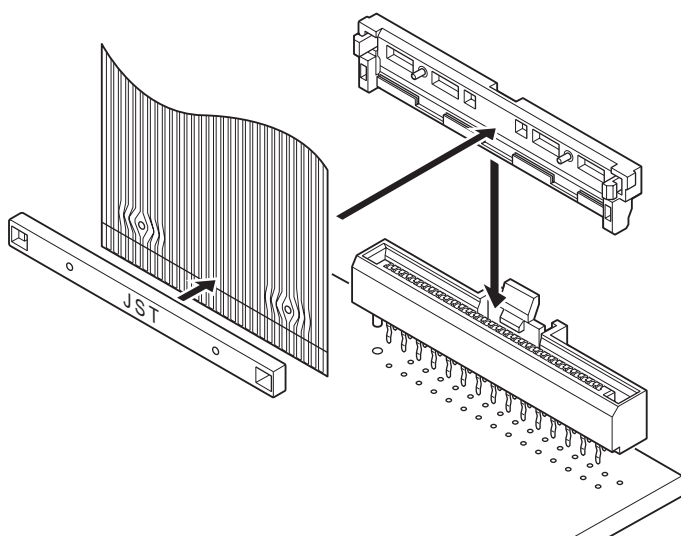
Contact reliability and FPC retention force is improved compared to the conventional connector for FPC.



The FMT connector is 1.0mm(.039") pitch FPC connector suitable for environments in automotive compartment.

New concept for connecting a male connector and a plug connector is adopted.

High contact reliability is ensured inside equipment where a FPC is frequently used such as an automotive meter.



## Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -30°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/30mΩ max.  
After environmental testing/500mΩ max.
- Insulation resistance: 500MΩ min.
- Withstanding voltage: 500V AC/minute
- Applicable FPC: Lead pitch/1.0mm(.039")  
Lead width/0.7mm(.028")  
Mating part thickness/0.08±0.02mm  
(.003"±.001")
- Applicable PC board: Thickness/1.6mm(.063")  
Hole size/0.75±0.05mm(.030"±.002")  
(Through-hole)

\* Contact JST if Lead-Free product is required.

\* Contact JST for details.

HIT

AIT

HCM

MIO

CPT

BMD

CIT

HIC

SQS

SQM

SQH

SQSI

SQW

SQF

SHUNTING

FEL

**FMT**

FOX

CN

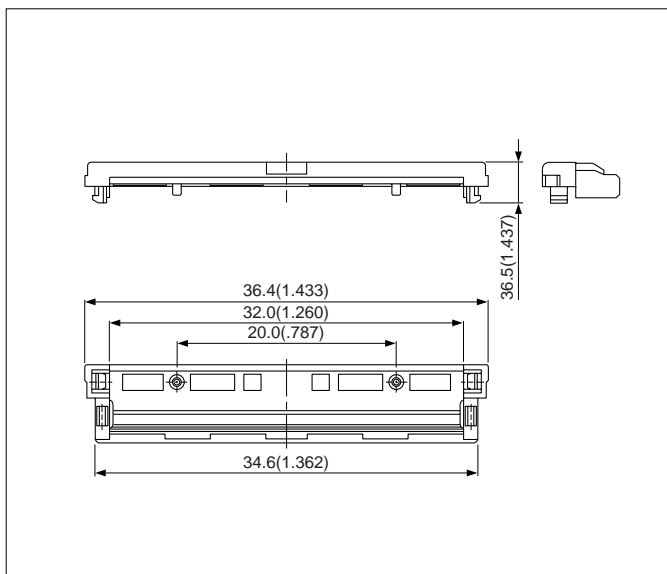
EA1

WPZ

JUNCTION BOX

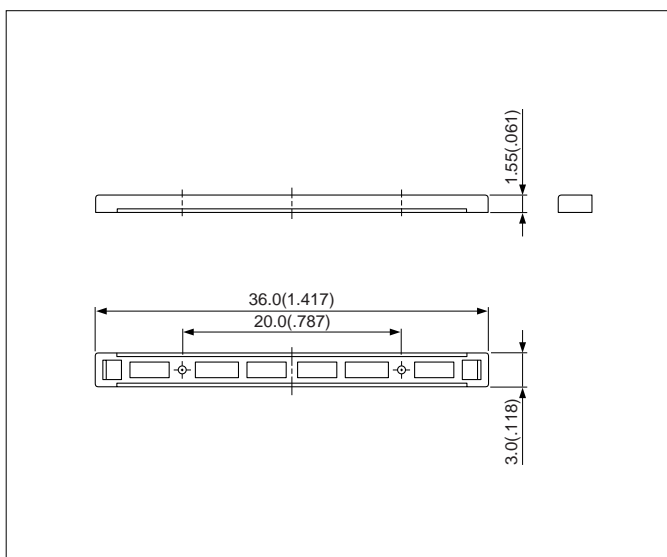
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## Plug housing



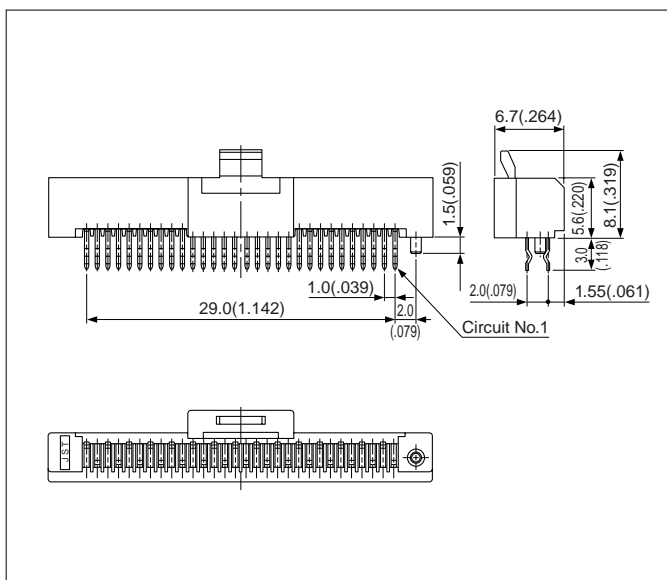
Circuits	Model No.	Q'ty/bag
30	<b>FMT-30P-A</b>	500
Material		
Glass-filled PPS, black		

## Retainer



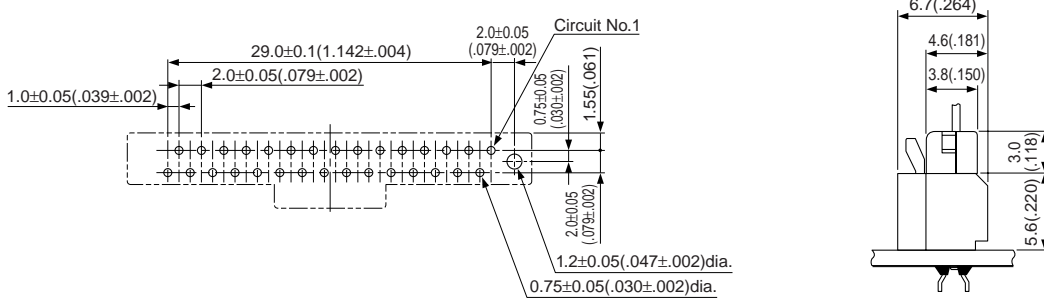
Circuits	Model No.	Q'ty/bag
30	<b>FMT-30P-B</b>	1,000
Material		
Glass-filled PPS, natural (white)		

## Header



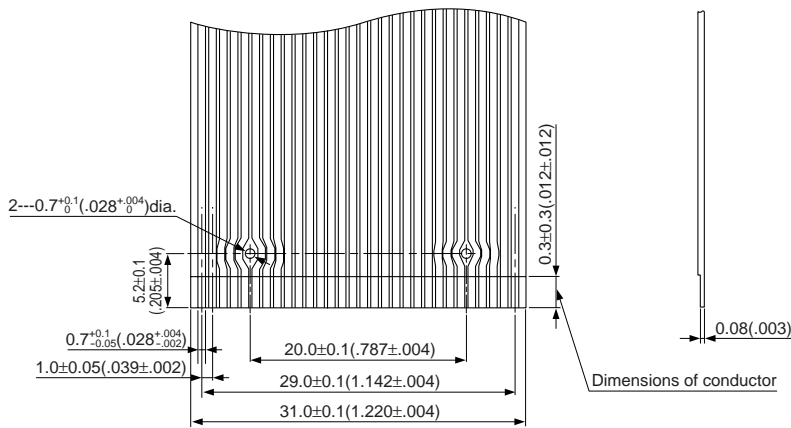
Circuits	Model No.	Q'ty/box(tray)
30	<b>30FMT-BTK</b>	385
Material and Finish		
Terminal: Copper alloy, copper-undercoated, tin alloy-plated Housing: Glass-filled 6T nylon, black		

### PC board layout and Assembly layout



Note: 1. Tolerances are non-cumulative:  $\pm 0.05$ mm ( $\pm .002$ " ) for all centers.  
 2. Hole dimensions differ according to the kind of PC board and piercing method.  
 The dimensions above should serve as a guideline. Contact JST for details.

### Lead section dimensions of FPC



HT  
AIT  
HCM  
MIO  
CPT  
BMD  
CIT  
HIC  
SQS  
SQM  
SQH  
SQSII  
SQW  
SQF  
SHUNT  
RING  
FEL  
FMT  
FOX  
CN  
EA1  
WPZ  
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