

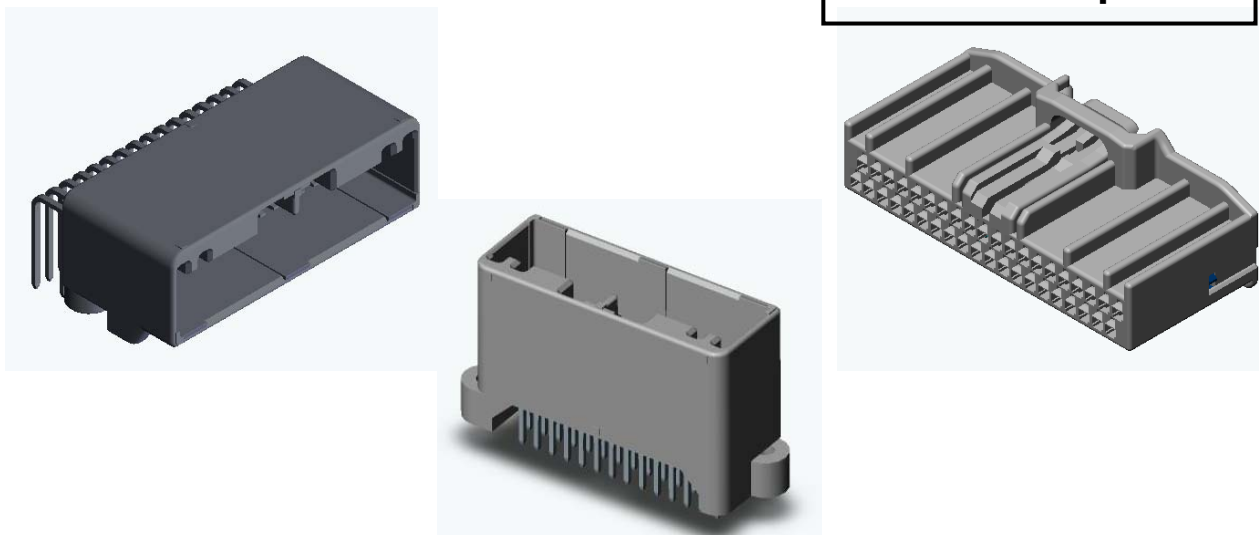
**NEW**  


Compact Automotive Connectors for PCB-to-Cable Applications CONNECTOR

MB-0116-3

## MX34 Series

January 2007

**RoHS Compliant**


The MX34 Series connectors are compact, non-waterproof connectors with a double row of contacts, and are developed for automotive use.

The up to 40 poles reduces mating and unmating force to 80N or less and improves workability. Furthermore, automotive connector requirements such as the preset type of double locking mechanism and box type of pin header are satisfied.

### Features

- Compact, lightweight, double row PCB-to-cable connector with 2.2 mm horizontal pitch and 3 mm diagonal pitch.
- Up to 40 poles reduces the mating and unmating force to 80N or less.
- Socket contact with box-type pin header is durable to external force; contact part is highly resistant to twisting and equipped with a proven double leaf spring.
- Adoption of a preset-type retainer facilitates easy wire harness operation.  
If retainer is not completely inserted in housing, the connector is not engaged, and incomplete contact insertion is detected.
- Lock spring is equipped with a bridge protecting the contacts from external load.

### General Specifications

- |   |   |
|---|---|
| • No. of contacts: 12, 16, 20, 24,<br>28, 32, 36, 40 pos.   | • Insulation resistance: 100M ohm min           |
| • Contact resistance:<br>5m ohm max. (initial)              | • Durability: 50 times                          |
| • Dielectric withstanding voltage:<br>AC 1000V (per minute) | • Applicable wire:<br>Please refer to next page |
| • Operating temperature:<br>-40 Deg. C to +85 Deg. C        |   |
| • Rated current: 3A   |   |

Materials and Finishes
------------------------

## Socket Connector

Components	Materials and Finishes
Socket housing	66NY+PPE(ALLOY)
Retainer	66NY+PPE(ALLOY)

## Pin Connector

Components	Materials and Finishes
Pin insulator	SPS GF 30
Pin contact	Brass/Sn plating
Pin contact2	Brass/Sn plating

## Socket Contact

Components	Materials and Finishes
Socket contact	Highly conductive material/ Sn plating

Applicable Wire
-----------------

Part Number	Applicable Wire	SJ Drawing
M34S75C4F1	AVSS0.3mm <sup>2</sup> , CHFUS0.22mm <sup>2</sup> ~0.35mm <sup>2</sup>	SJ038527
M34S75C4F2	AVSS0.5mm <sup>2</sup> , CHFUS0.5mm <sup>2</sup> ~0.75mm <sup>2</sup>	SJ038528
M34S75C4F3	CAN SD 0.35mm <sup>2</sup> (note1)	SJ038747
M34S75C4F4	AVSS0.85mm <sup>2</sup> (note2)	SJ038893

Note 1: M34S75CF3 and M34S75CF4 can only be inserted in double row cavities on both sides, four housing cavities in total.

Crimp Tool
------------

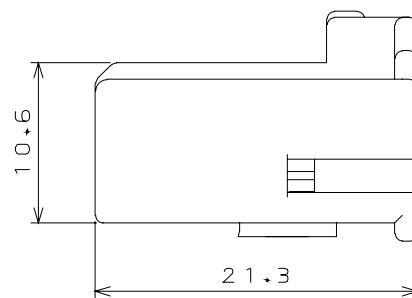
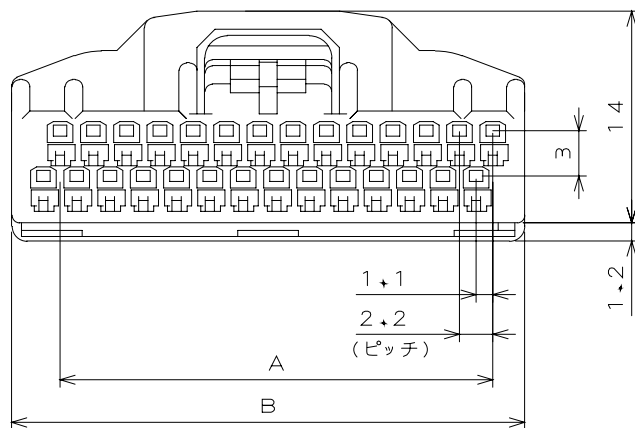
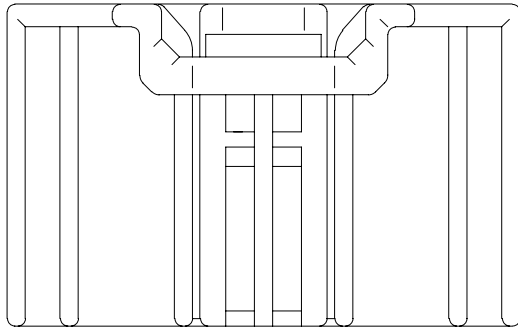
Part Number	Hand Crimp Tool	Semi Automatic Applicator	Automatic Applicator
M34S75C4F1	CT150-2-MX34	350-MX34B-2	350-MX34B-3B
M34S75C4F2	CT150-1-MX34		
M34S75C4F3, 4	-----	350-MX34C-2	350-MX34C-3B

Withdrawal Tool
-----------------

ET-MX34-1
-----------

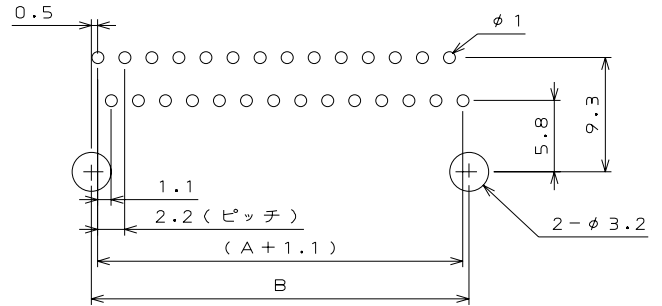
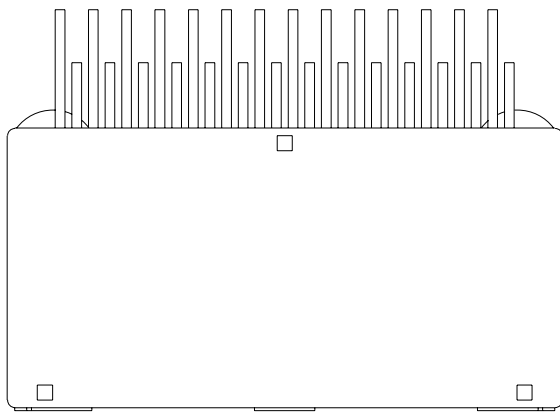
Outside Dimension

## Socket housing



No. of pos.	Part Number	SJ Drawing	Diameter(A)	Diameter(B)
12	MX34012SF1	SJ100717	11.0	16.3
16	MX34016SF1	SJ038754	15.4	20.7
20	MX34020SF1	SJ038752	19.8	25.1
24	MX34024SF1	SJ100271	24.2	29.5
28	MX34028SF1	SJ038623	28.6	33.9
32	MX34032SF1	SJ038756	33.0	38.3
36	MX34036SF1	SJ100270	37.4	42.7
40	MX34040SF1	SJ038526	41.8	47.1

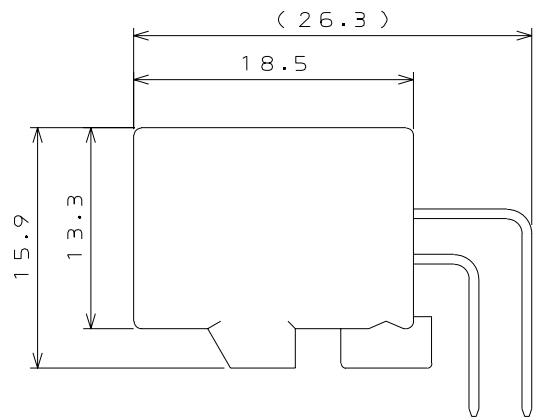
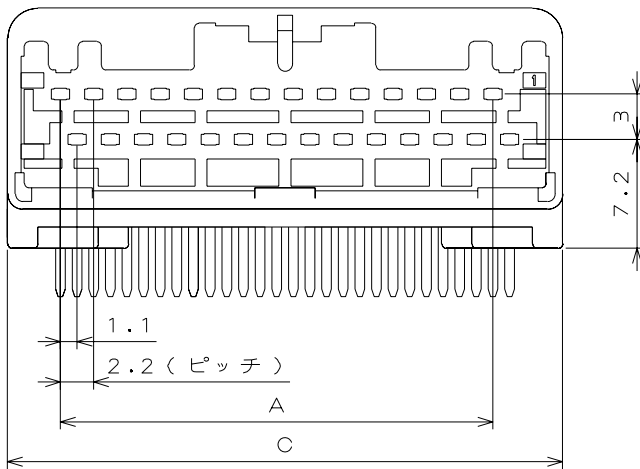
# Angle Pin Header



P.C.B. HOLE PATTERNS (REF.)

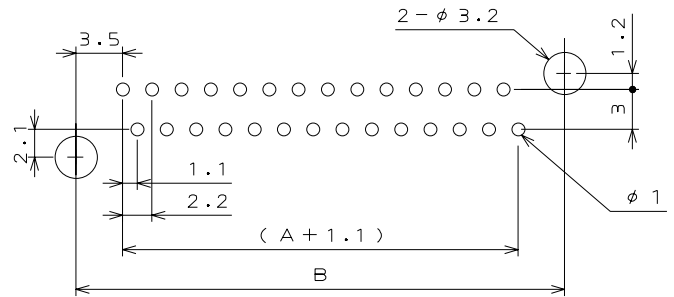
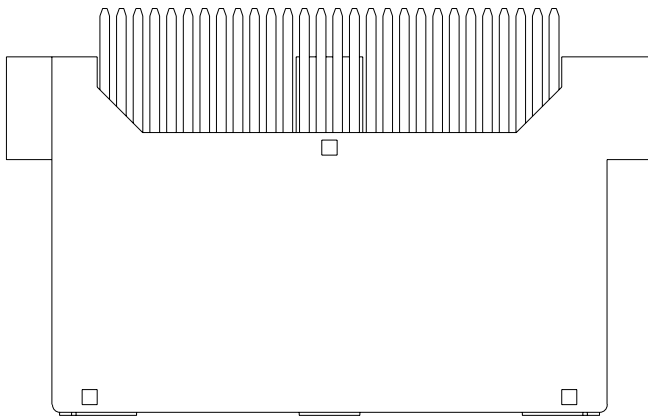
基板取付穴寸法 (参考)

THICKNESS (基板厚) : t 1.6



No. of pos.	Part Number	SJ Drawing	Diameter(A)	Diameter(B)	Diameter(C)
12	MX34012NF1	SJ100715	11.0	13.1	19.1
16	MX34016NF1	SJ038753	15.4	17.5	23.5
20	MX34020NF1	SJ038751	19.8	21.9	27.9
24	MX34024NF1	SJ100269	24.2	26.3	32.3
28	MX34028NF2	SJ106304	28.6	30.7	36.7
32	MX34032NF2	SJ106305	33.0	35.1	41.1
36	MX34036NF2	SJ106307	37.4	39.5	45.5
40	MX34040NF2	SJ106309	41.8	43.9	49.9

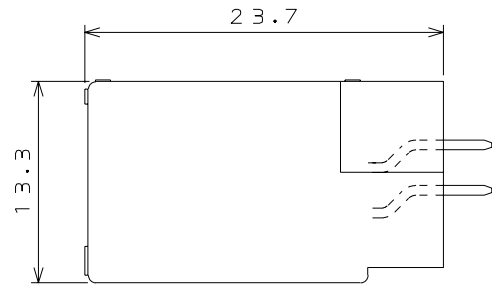
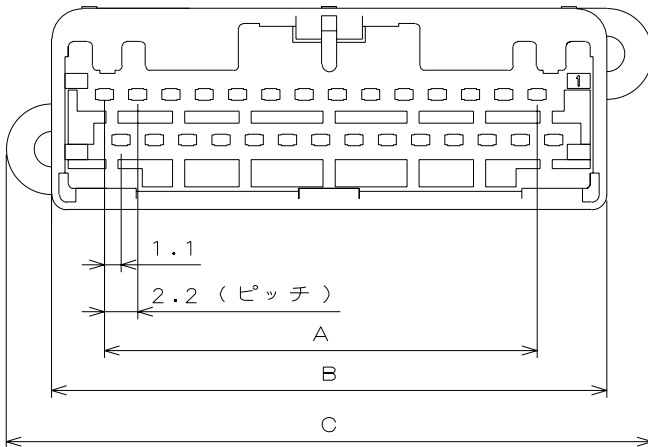
# Straight Pin Header



P.C.B. HOLE PATTERNS (REF.)

基板取付穴寸法(参考)

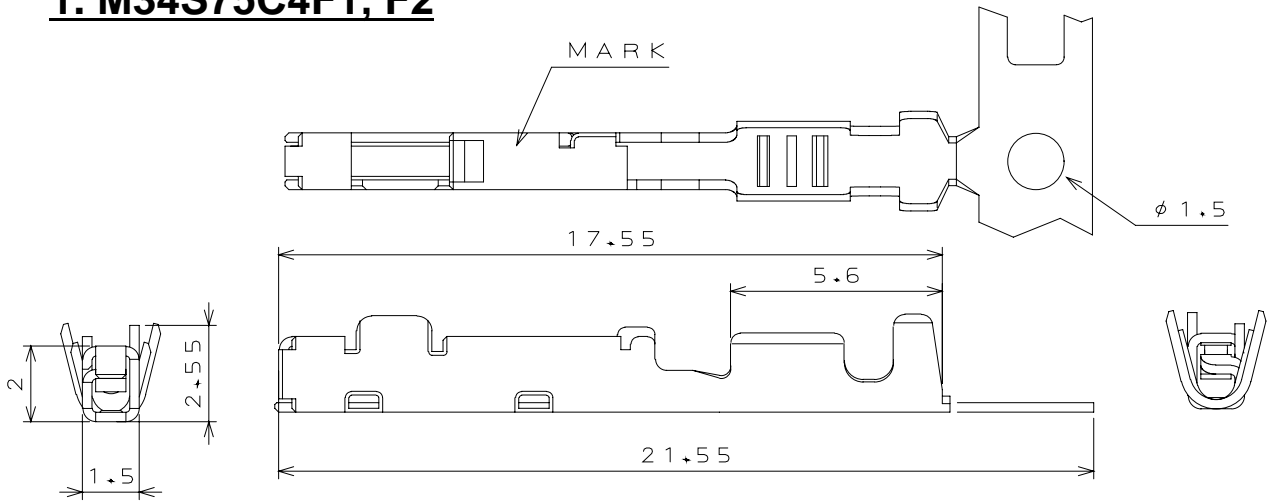
THICKNESS (基板厚) : t 1.6



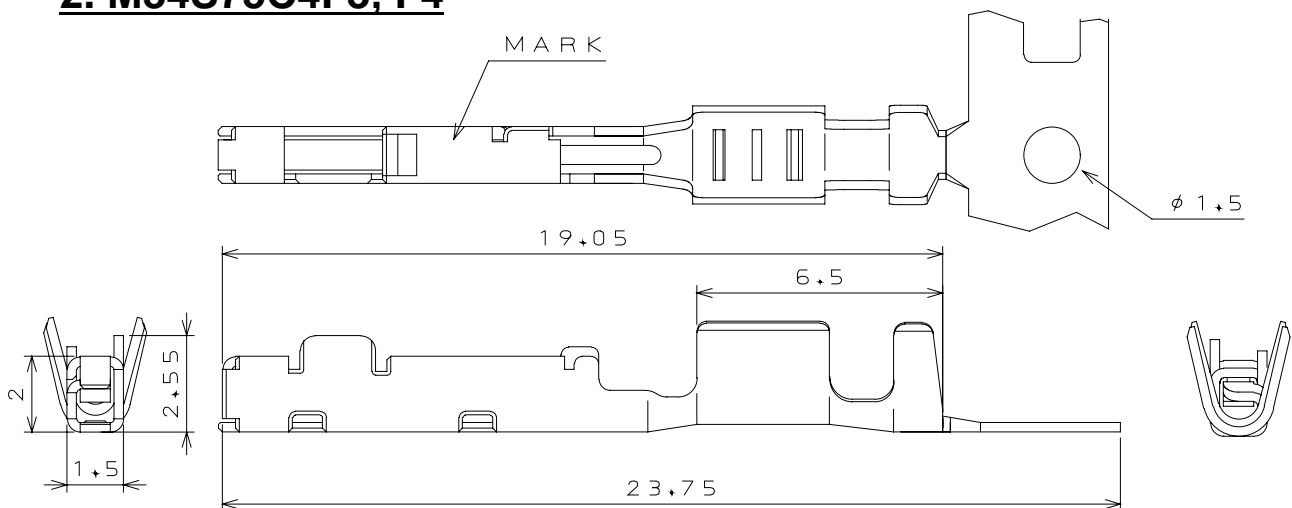
No. of pos.	Part Number	SJ Drawing	Diameter(A)	Diameter(B)	Diameter(C)
12	MX34012UF1	SJ100716	11.0	19.1	25.1
16	MX34016UF1	SJ038766	15.4	23.5	29.5
20	MX34020UF1	SJ038765	19.8	27.9	33.9
24	MX34024UF1	SJ100221	24.2	32.3	38.3
28	MX34028UF2	SJ106312	28.6	36.7	42.7
32	MX34032UF2	SJ106313	33.0	41.1	47.1
36	MX34036UF2	SJ106314	37.4	45.5	51.5
40	MX34040UF2	SJ106315	41.8	49.9	55.9

# Socket Contact

## 1. M34S75C4F1, F2



## 2. M34S75C4F3, F4



### Others

Specification

JACS-1754

Handling Instructions

JACS-1754

**Notice:** Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: Computers, Office machines, Measuring devices, Telecommunication devices (Terminals, Mobile devices), AV devices, Household applications, FA devices, etc.

## Japan Aviation Electronics Industry, Limited

Product Marketing Division  
 Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539  
 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946