

# JC20 SERIES CONNECTORS

## Two-Piece Connectors for IC Memory Cards

### ■ JC20 SERIES B • C • D • E TYPE CONNECTORS

#### FEATURES

- High density contact spacing:  
1.0mm (.039") or 1.27mm (.050") depending on the connector type
- Socket connectors for card side are SMT type and pin connectors for system are right angle through hole type
- Low profile socket housing
- Socket contact connecting area is protected from static electricity
- Highly reliable socket contacts with three connecting points (C, D, E type)

#### GENERAL SPECIFICATIONS

Number of Contacts (See page 196 to 202)	20, 38, 45 or 60
Contact Spacing (See page 196 to 202)	1.27mm (.050"), or 1.0mm (.039")
Current Rating	0.5 Amps
Dielectric Withstanding Voltage	250 VAC r.m.s. (for one minute)
Contact Resistance	20 milliohms max.
Insulation Resistance	100 megohms min.
Operating Temperature	-40°C to +80°C

#### MATERIALS AND FINISHES

##### *Socket Connector*

Description	Materials/Finishes
Insulator	Glass-filled Nylon (UL94V-0, Black) For B type, Glass-filled PET (UL94V-0, Black)
Contact	Phosphor Bronze (B, D type): Beryllium Copper (C, E type): Connecting area: Gold over Nickel Terminal area: Tin plating over Nickel

##### *Pin Contact*

Insulator	Glass-filled PET (UL94V-0, Black)
Contact	Phosphor Bronze Connecting area: Gold over Nickel Terminal area: Tin plating
Post (C type)	Brass/Tin plating

Dimensions in mm (inches).

# JC20 SERIES CONNECTORS

## Two-Piece Connectors for IC Memory Cards

### JC20 SERIES B TYPE CONNECTORS • SOCKET CONNECTOR FOR CARD SIDE

38 CONTACTS/1.27 (.050) PITCH

Type	Part Number	Applicable PCB Thickness
F1	JC20-B38S-F1-A1	$0.37 \pm 0.08$ (.015 $\pm$ .003)
F2	JC20-B38S-F2-A1	$0.5^{+0}_{-0.05}$ (.020 <sup>+0.000</sup> <sub>-.002</sub> )
F3	JC20-B38S-F3-A1	$0.2 \pm 0.09$ (.008 $\pm$ .004)

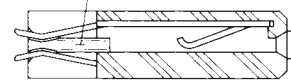
(Note) Contact finish: Gold plating 0.1 $\mu$ m (.000004") min. on connecting area.

#### Section A-A

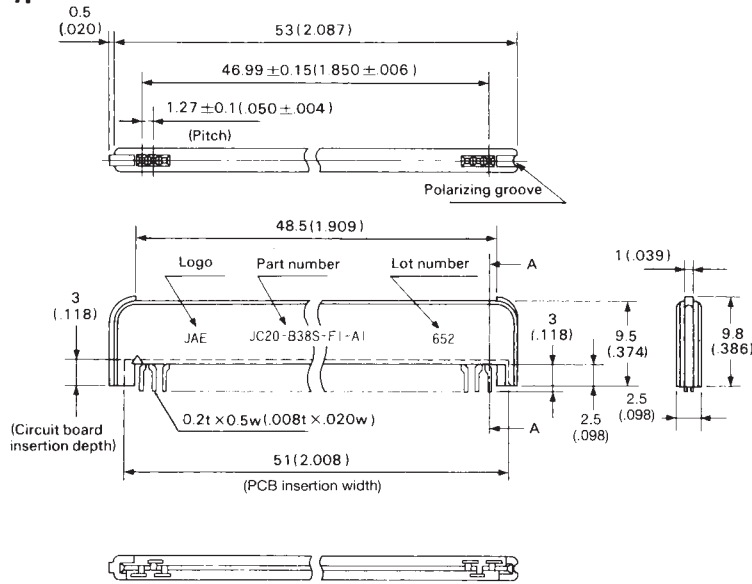
#### F1 Type

Double Sided Mounting

Applicable PCB thickness:  
 $0.37 \pm 0.08$  (.015  $\pm$  .003 inch)



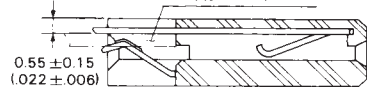
#### F1 Type



#### F2 Type

Double Sided Mounting

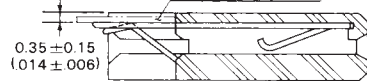
Applicable PCB thickness:  
 $0.5^{+0}_{-0.05}$  (.020<sup>+0.000</sup><sub>-.002</sub> inch)



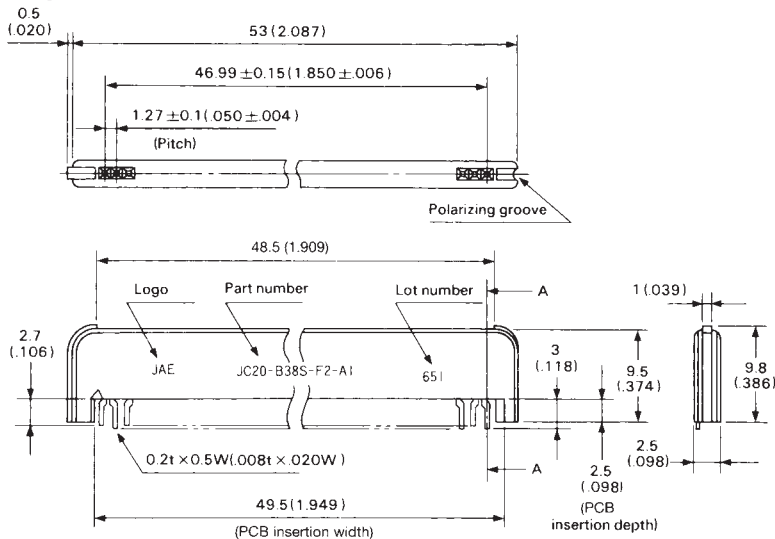
#### F3 Type

Single Sided Mounting

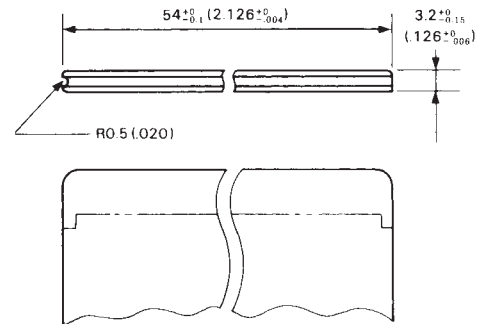
Applicable PCB thickness:  
 $0.2 \pm 0.09$  (.008  $\pm$  .004 inch)



#### F2/F3 Type



#### Memory Card Outline Dimensions (Ref. only)



Dimensions in mm (inches).

# JC20 SERIES CONNECTORS

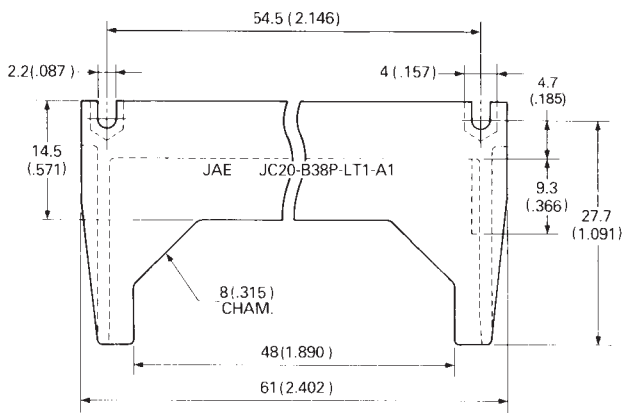
## Two-Piece Connectors for IC Memory Cards

### JC20 SERIES B TYPE CONNECTORS • PIN CONNECTOR FOR SYSTEM SIDE 38 CONTACTS/1.27 (.050) PITCH • RIGHT ANGLE THROUGH HOLE TYPE

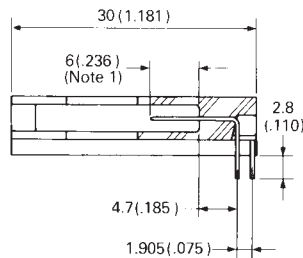
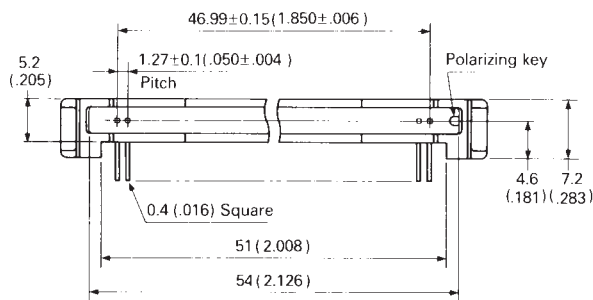
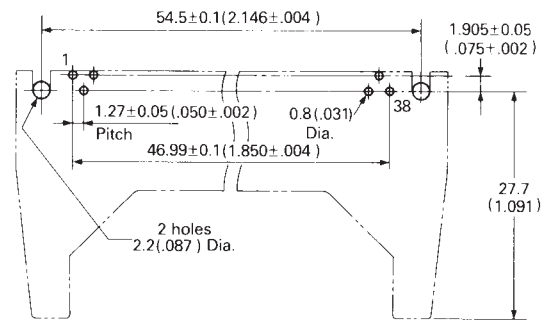
Part Number:

**JC20-B38P-LT1-A1**

(Note) Contact finish: Gold plating 0.1 $\mu$ m (.000004") min. on connecting area.



**Circuit Board Through Hole Pattern (Ref. only)**  
Applicable circuit board thickness: 1.6 (.063)



Note 1: Pin contact area length:  
5 (.197) for contact No.  
1 & 38 only.  
6 (.236) for others.

Dimensions and specifications subject to change without notice.

# JC20 SERIES CONNECTORS

## Two-Piece Connectors for IC Memory Cards

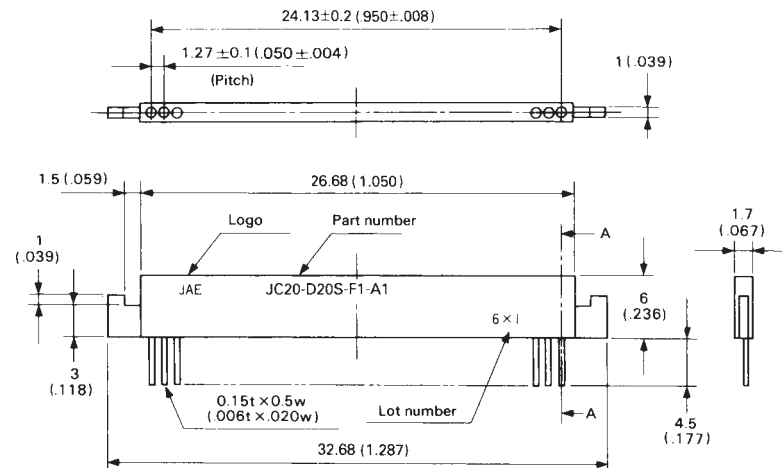
### JC20 SERIES D TYPE CONNECTORS • SOCKET CONNECTOR FOR CARD SIDE

20 CONTACTS/1.27 (.050) PITCH

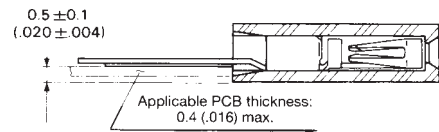
Part Number:

**JC20-D20S-F1-A1**

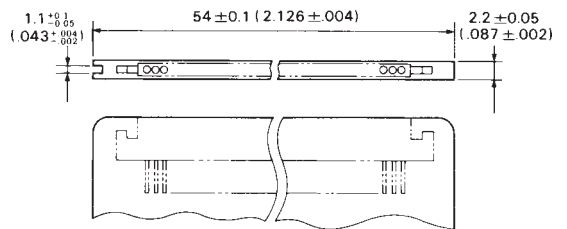
(Note) Contact finish: Gold plating 0.1 $\mu$ m (.000004") min. on connecting area.



#### Section A-A



#### Memory Card Outline Dimensions

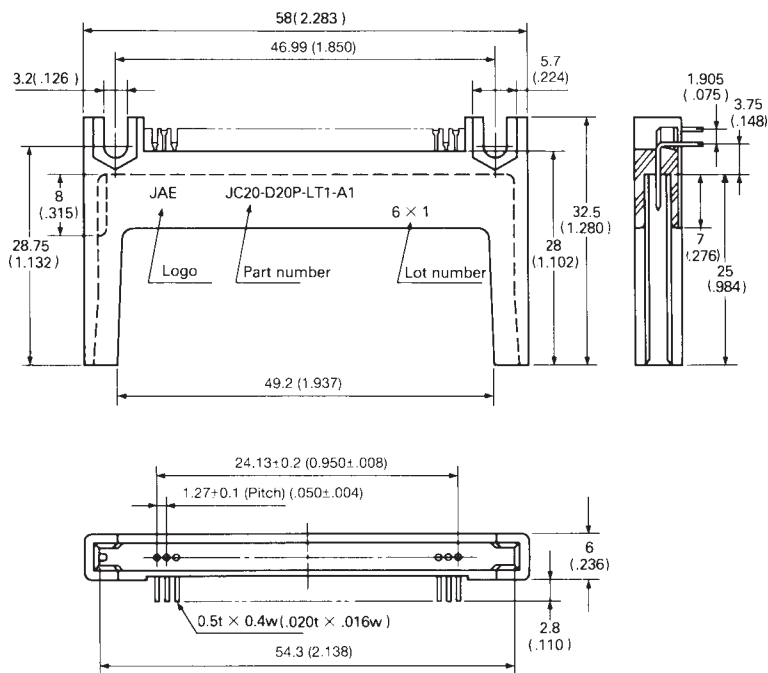


### JC20 SERIES D TYPE CONNECTORS • PIN CONNECTOR FOR SYSTEM SIDE

Part Number:

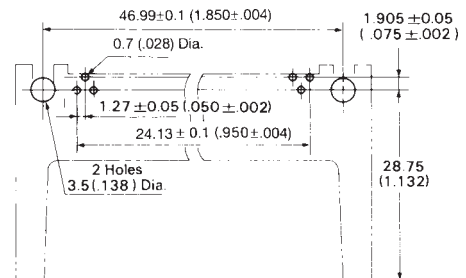
**JC20-D20P-LT1-A1**

(Note) Contact finish: Gold plating 0.1 $\mu$ m (.000004") min. on connecting area.



#### PCB Through Hole Pattern (Ref. only)

Applicable PCB thickness: 1.6 (.063)



Dimensions in mm (inches).

# JC20 SERIES CONNECTORS

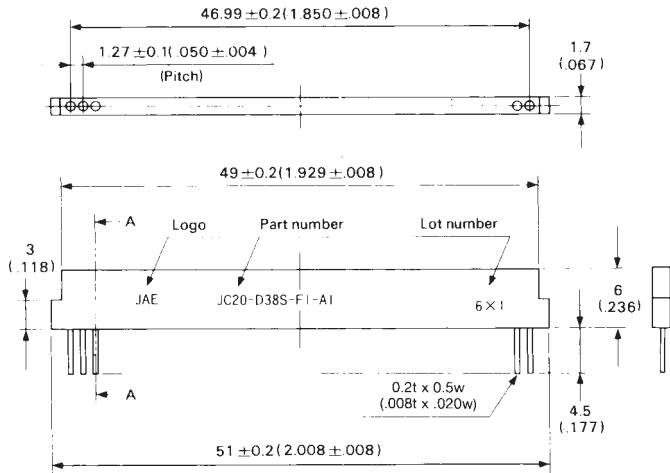
## Two-Piece Connectors for IC Memory Cards

### JC20 SERIES D TYPE CONNECTORS • SOCKET CONNECTOR FOR CARD SIDE 38 CONTACTS/1.27 (.050) PITCH

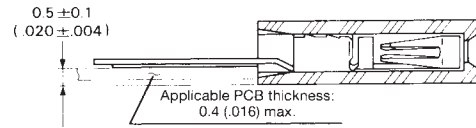
Part Number:

**JC20-D38S-F1-A1**

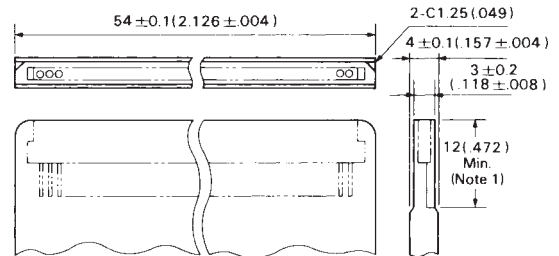
(Note) Contact finish: Gold plating 0.1 $\mu$ m (.000004") min. on connecting area.



#### Section A-A



#### Memory Card Outline Dimensions



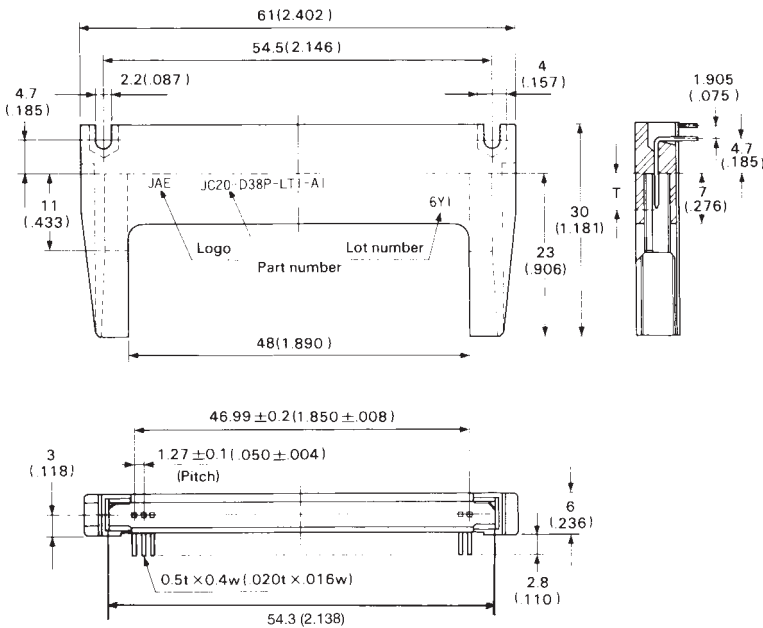
Note 1: Card thickness is 3 ± 0.2 (.118 ± .008) in this area.

### JC20 SERIES D TYPE CONNECTORS • PIN CONNECTOR FOR SYSTEM SIDE

Part Number:

**JC20-D38P-LT1-A1**

(Note) Contact finish: Gold plating 0.1 $\mu$ m (.000004") min. on connecting area.

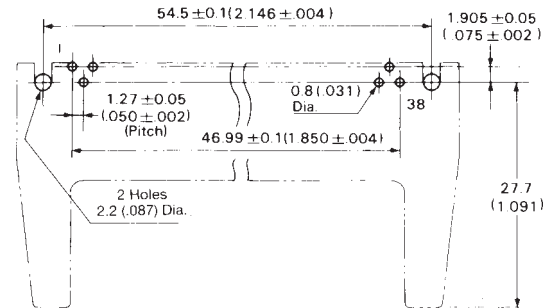


#### Pin contact area length (Dimension T)

Cont. No.	1, 2, 3, 36, 38	4, 35, 37	All Others
Length	5 (.197)	4 (.157)	4.5 (.177)

#### PCB Through Hole Pattern (Ref. only)

Applicable PCB thickness: 1.6 (.063)



Dimensions and specifications subject to change without notice.

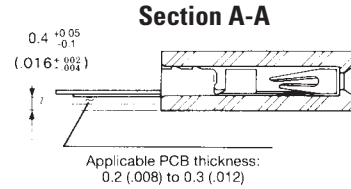
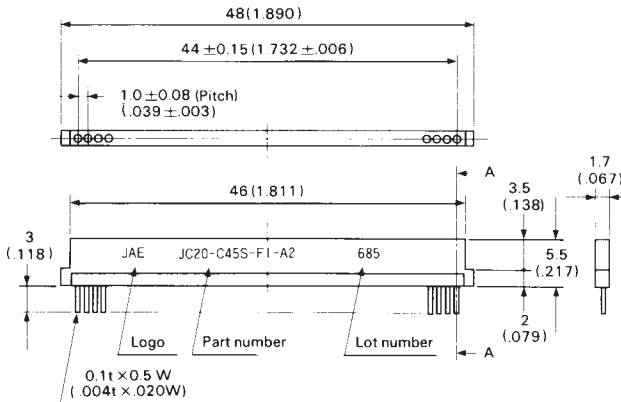
# JC20 SERIES CONNECTORS

## Two-Piece Connectors for IC Memory Cards

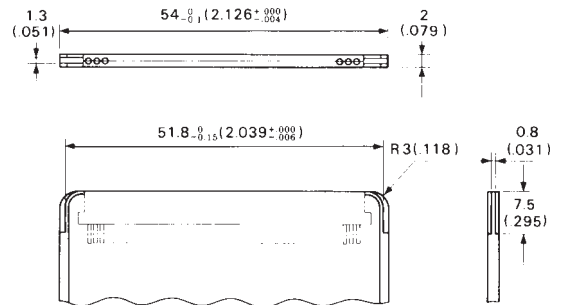
### JC20 SERIES C TYPE CONNECTORS • SOCKET CONNECTOR FOR CARD SIDE 45 CONTACTS/1.0 (.039) PITCH

Part Number:  
**JC20-C45S-F1-A1**

(Note) Contact finish: Gold plating 0.1μm (.000004") min. on connecting area.



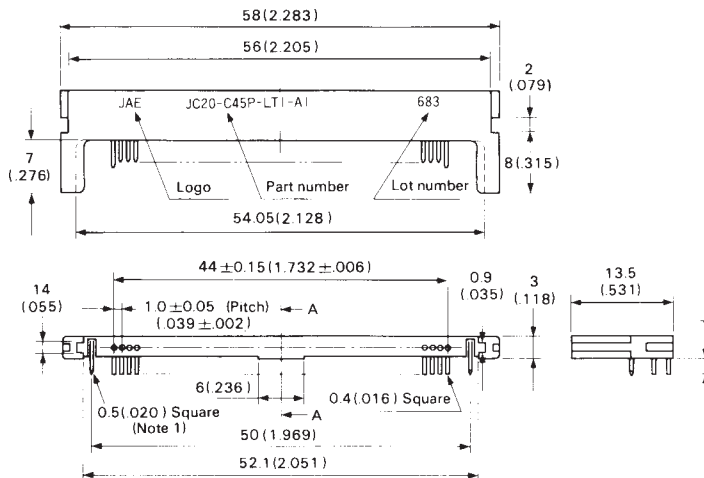
#### Memory Card Outline Dimensions



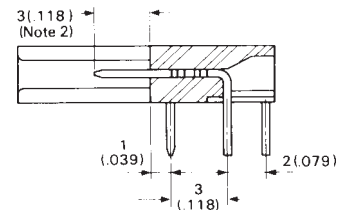
### JC20 SERIES C TYPE CONNECTORS • PIN CONNECTOR FOR SYSTEM SIDE

Part Number	T
JC20-C45P-LT1-A1	2 (.079)
JC20-C45P-LT2-A1	2.8 (.110)

(Note) Contact finish: Gold plating 0.1μm (.000004") min. on connecting area.

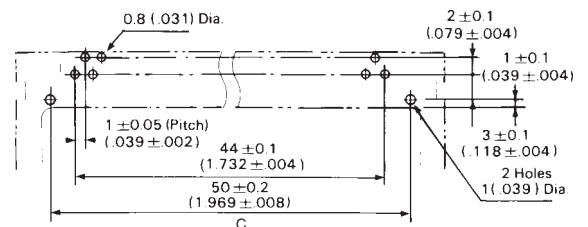


#### Section A-A



Note 2: 3.8 (.150) for contact No. 1 & 45 only.  
3 (.118) for others.

#### PCB Through Hole Pattern (Ref. only) Applicable PCB thickness: 1.6 (.063)



Note 1: Post to prevent connector from loosening (Both ends).

Dimensions in mm (inches).

# JC20 SERIES CONNECTORS

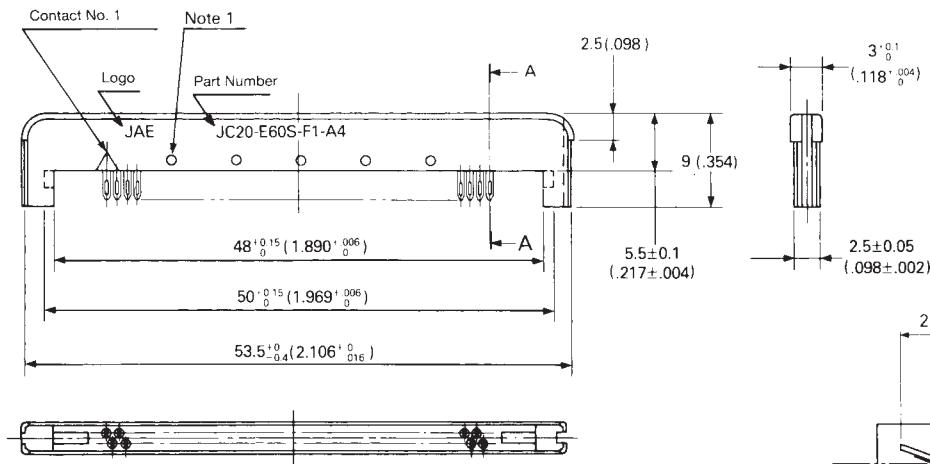
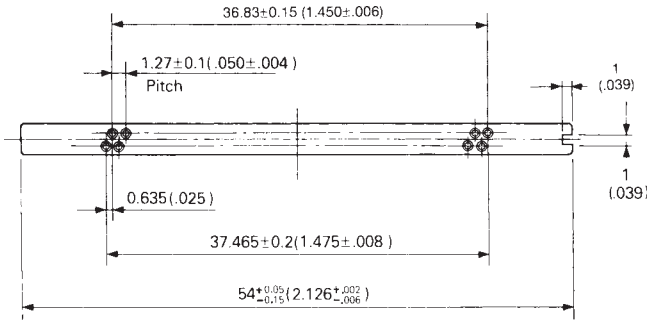
## Two-Piece Connectors for IC Memory Cards

### JC20 SERIES E TYPE CONNECTORS • SOCKET CONNECTOR FOR CARD SIDE 60 CONTACTS/1.27 (.050) PITCH

Part Number:

**JC20-E60S-F1-A4**

(Note) Contact finish: Gold plating 0.5μm (.000020") min. on connecting area.

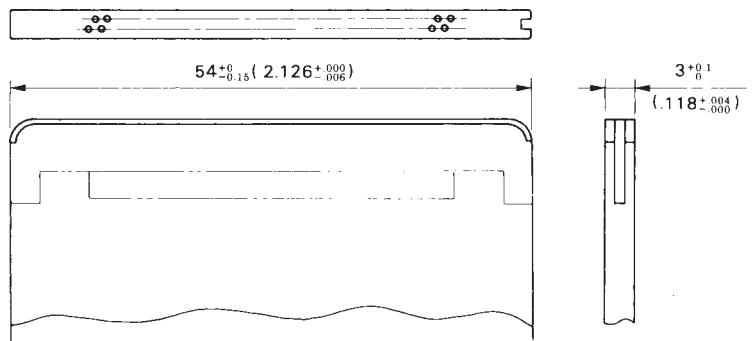


**Section A-A**

Applicable PCB  
0.6~0.8 (.024~.031) thick

Note 1: ○ shows contact No. location  
(Front side: 11, 21, 31, 41, 51,  
Rear side: 10, 20, 30, 40, 50, 60)

#### Memory Card Outline Dimensions (Ref. only)



Dimensions and specifications subject to change without notice.

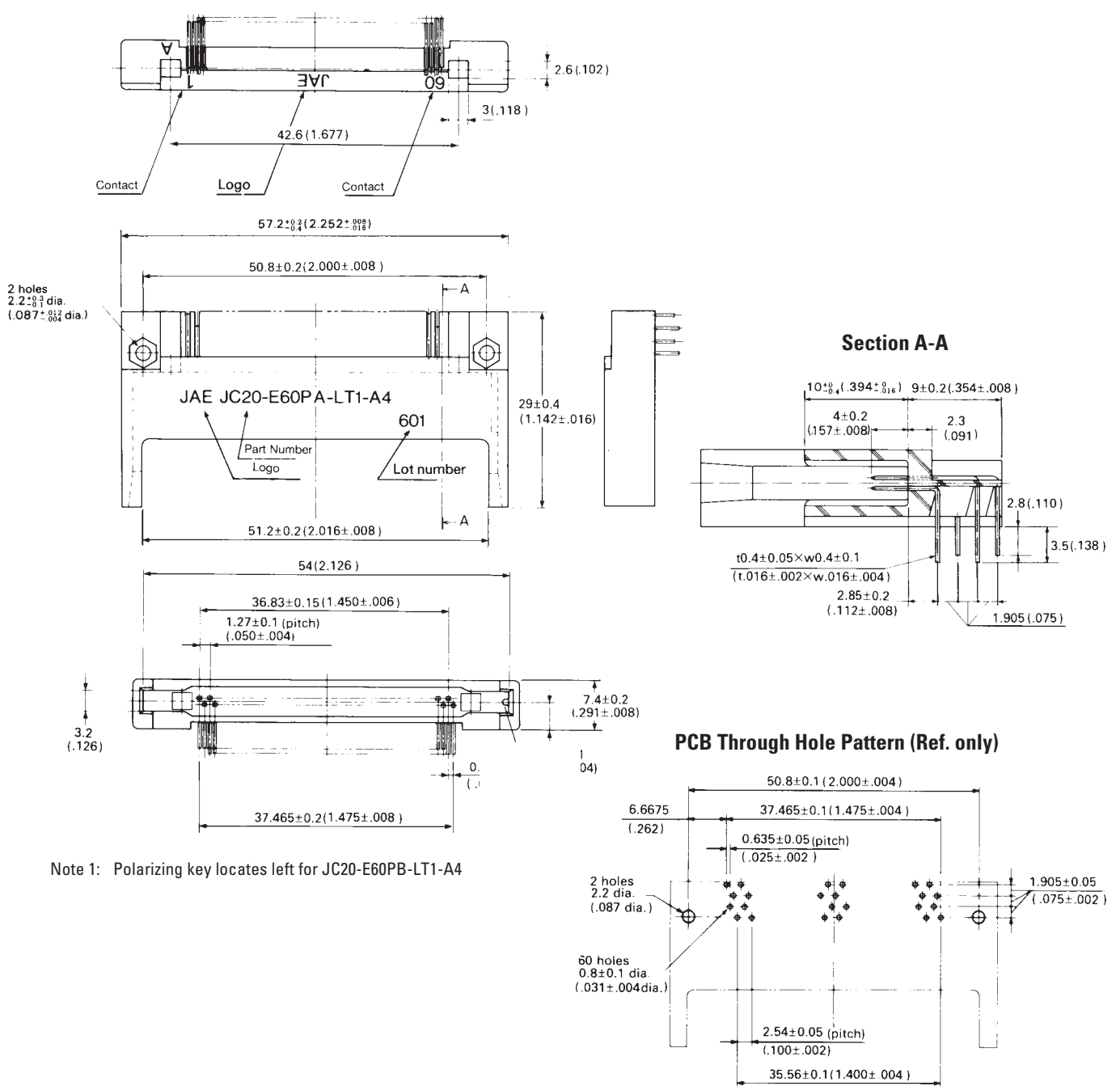
# JC20 SERIES CONNECTORS

## Two-Piece Connectors for IC Memory Cards

### JC20 SERIES E TYPE CONNECTORS • PIN CONNECTOR FOR SYSTEM SIDE 60 CONTACTS/1.27 (.050) PITCH

Part Number	Polarizing Key Location from IC card insertion side
JC20-E60PA-LT1-A4	Right
JC20-E60PB-LT1-A4	Left

(Note) Contact finish: Gold plating 0.5μm (.000020") min. on connecting area.



Note 1: Polarizing key locates left for JC20-E60PB-LT1-A4

Dimensions in mm (inches).