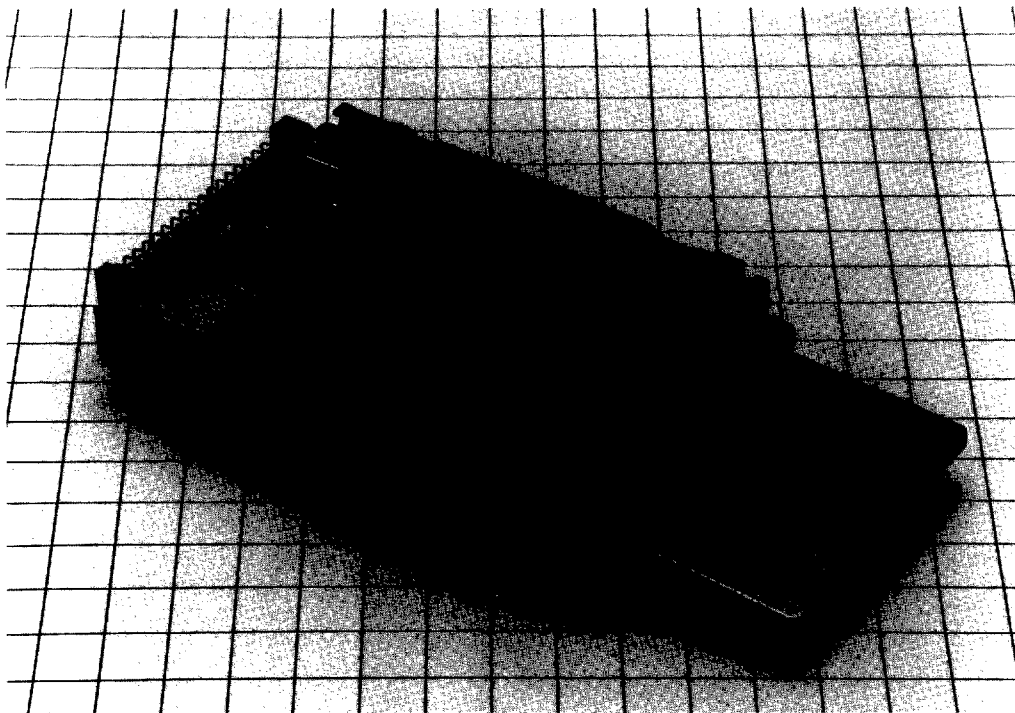


# HRS IC6 SERIES Low Cost Version

## 2-Slot Connectors for PCMCIA Type III and JEIDA Ver. 4.2 IC Memory Cards

### ■ GENERAL

The IC6 series consists of pin connectors equipped with two slots for use with JEIDA Ver. 4.2 IC memory cards. These connectors can also be used for PCMCIA (PC Memory Card International Association) Type III cards.



### ■ FEATURES

- (1) IC memory cards (Types I and II) can be mounted in two slots, and card eject buttons are provided on either side for easy operation. When cards are inserted, the card in the lower slot can be ejected smoothly by pressing the right eject button, the card in the upper slot by pressing the left eject button.
- (2) These connectors can be used not only with Type I and II cards, but also with JEIDA/PCMCIA Type III cards. (When Type III cards are used in the lower slot, it is not possible to insert cards into the top slot.)
- (3) In addition to the 2-slot, 11.6mm low profile type, stand-off types (2.2mm and 5mm) allowing parts to be mounted on the board below the connector are also available.
- (4) Equipped with frame ground pins (2 slots common).
- (5) The reverse type used for mounting to the back surface of the board is also now available.
- (6) Types for use with low voltage (3.3 V) cards are now available.

## ■ MATERIALS AND TREATMENT

| Item                   | Material         | Treatment               | Remarks               |         |
|------------------------|------------------|-------------------------|-----------------------|---------|
| Insulators             | Connector        | PBT plastic<br>(Note 1) | Black                 | UL94V-0 |
|                        | Card guide       |                         |                       |         |
|                        | Eject buttons    |                         |                       |         |
| Pins                   | Connector        | Brass                   | Contact: Gold plating |         |
|                        | Frame ground pin | Phosphor bronze         | Mount: Solder plating |         |
| Eject section fittings | SUS              |                         |                       |         |
| Nut                    | Steel            | Nickel plating          | M2×0.4                |         |
| Lock pin               | Phosphor bronze  | Solder plating          |                       |         |

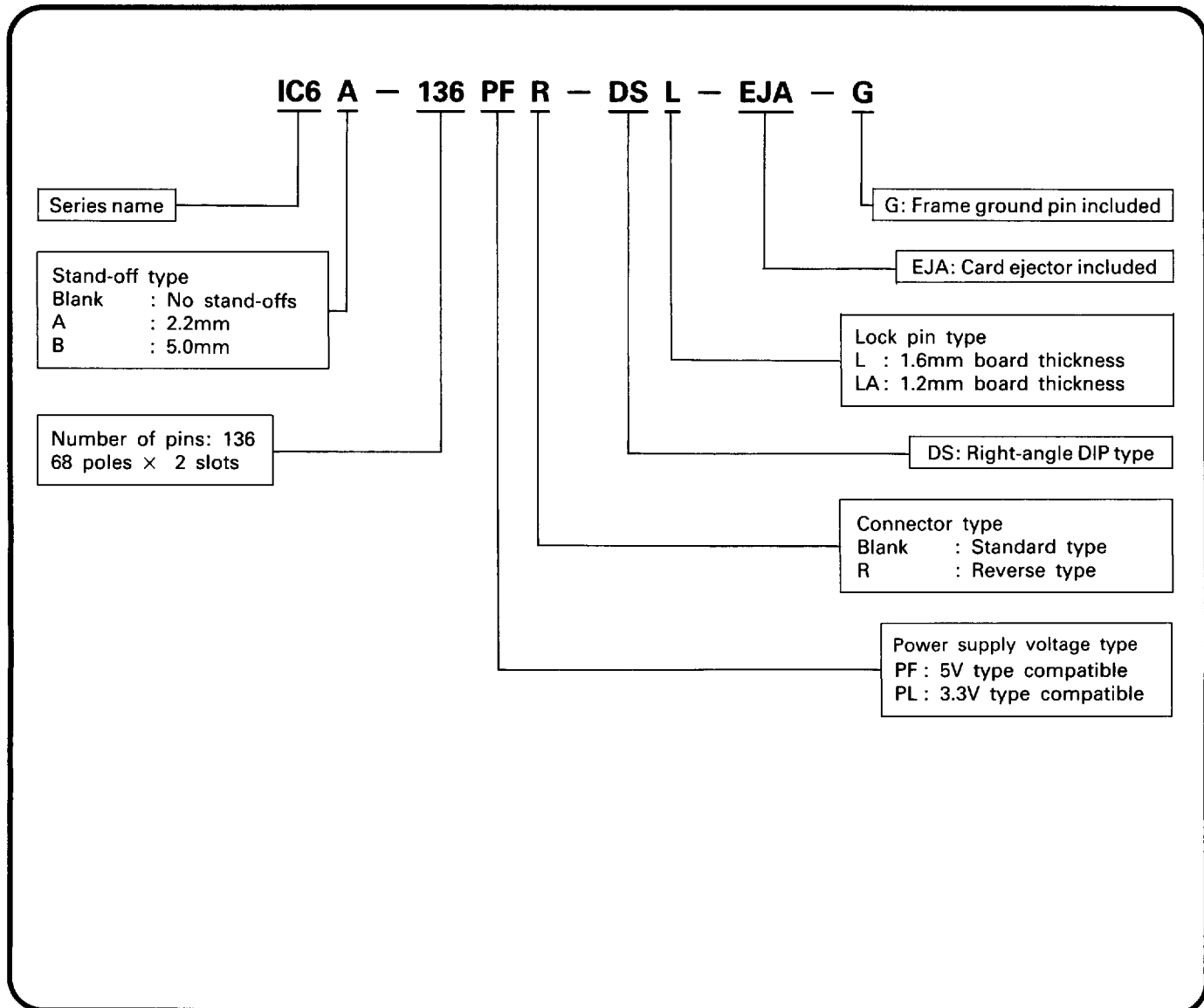
**Note 1:** PBT plastic = polybutylene terephthalate plastic

## ■ ELECTRICAL CHARACTERISTICS

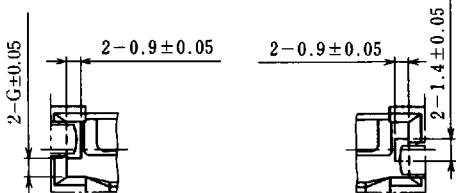
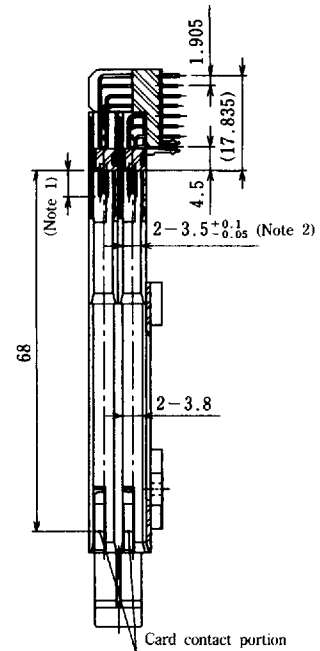
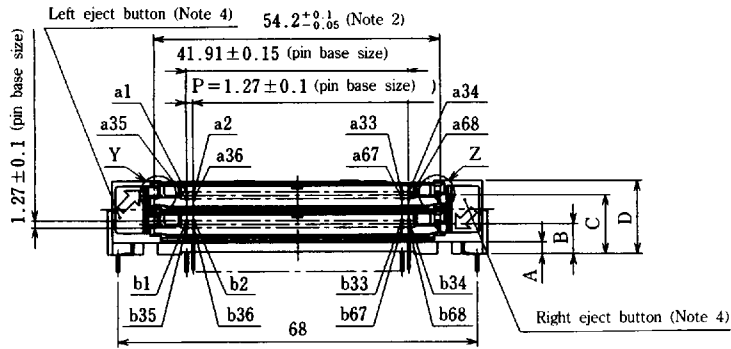
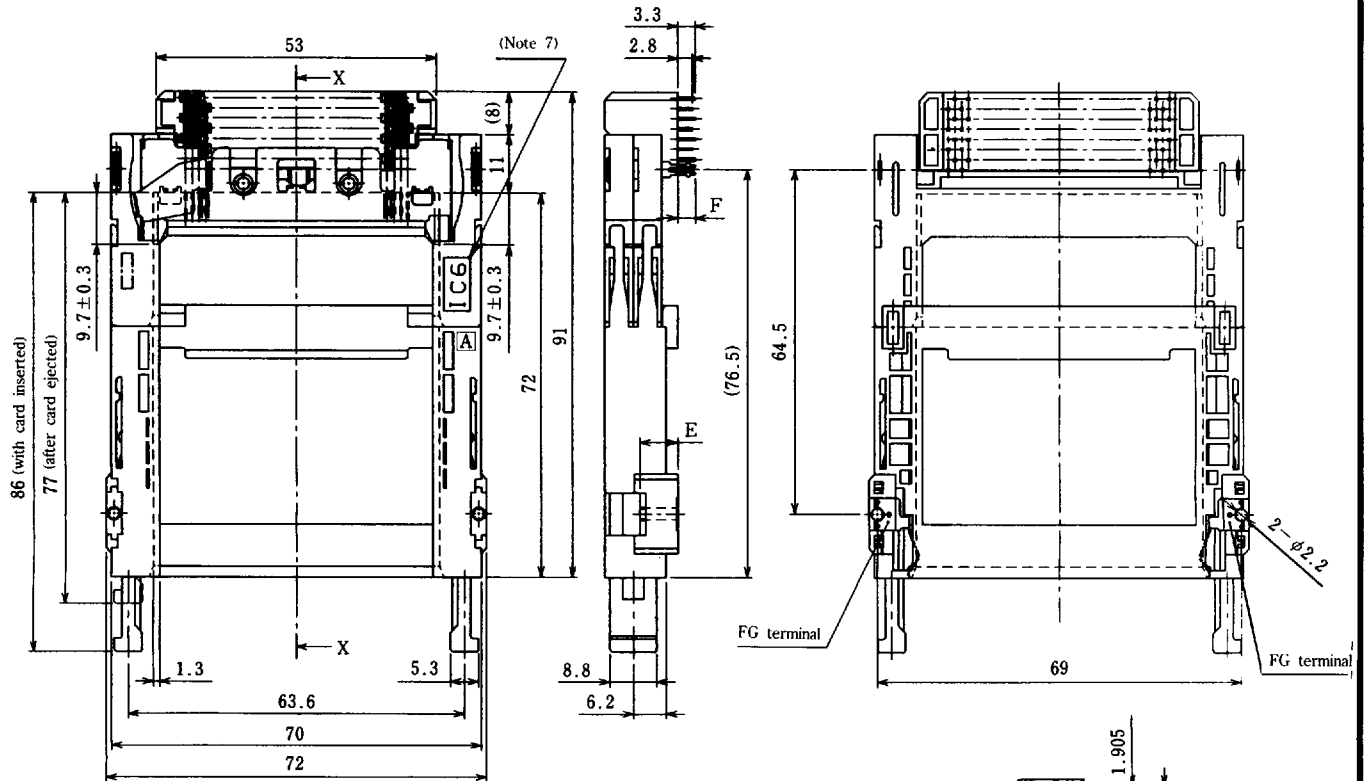
| Item                  | Conditions                     | Rating              |
|-----------------------|--------------------------------|---------------------|
| Current capacity      | per pin                        | 0.5A                |
| Dielectric strength   | for 1 minute at standard value | AC 500V             |
| Insulation resistance | at DC 500V                     | 1,000MΩ or greater  |
| Contact resistance    | at DC 1mA                      | 60mΩ or less (Note) |

**Note:** The standard value of the contact resistance according to JEIDA Ver. 4.2 is 40mΩ or less, but as the pins of this connector are long and the semiconductor resistance is high, the rating has been set to 60mΩ or less.

## ■ STRUCTURE OF THE PRODUCT NUMBER



# IC6 SERIES CONNECTOR DIMENSIONS (Standard Type)



**Table 1**

| Pin no.               | Pin length |
|-----------------------|------------|
| 1, 17, 34, 35, 51, 68 | 5.0±0.1    |
| 36, 67                | 3.5±0.1    |
| Others                | 4.25±0.1   |

Detail of part Y

Detail of part Z

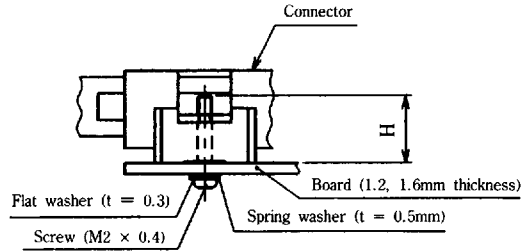
Section XX

Units: mm

| HRS No.    | Model No.            | A (stand-off height) | B   | C    | D    | E    | F   | G   | Applicable board thickness | Recommended screw length (Note 6) | H (Note 6) | Power supply voltage type |
|------------|----------------------|----------------------|-----|------|------|------|-----|-----|----------------------------|-----------------------------------|------------|---------------------------|
| 640-0351-3 | IC6-136PF-DSL-EJA-G  | 0                    | 3.5 | 8.9  | 11.6 | 5.0  | 3.3 | 1.2 | 1.6±0.15                   | 10                                | 6.8~9.8    | 5V                        |
| 640-0352-6 | IC6A-136PF-DSL-EJA-G | 2.2                  | 5.7 | 11.1 | 13.8 | 7.2  | 3.3 | 1.2 | 1.6±0.15                   | 12                                | 9.0~12.0   | 5V                        |
| 640-0353-9 | IC6B-136PF-DSL-EJA-G | 5                    | 8.5 | 13.9 | 16.6 | 10.0 | 3.3 | 1.2 | 1.6±0.15                   | 16                                | 11.8~15.8  | 5V                        |
| 640-0354-1 | IC6-136PF-DSL-EJA-G  | 0                    | 3.5 | 8.9  | 11.6 | 5.0  | 2.9 | 1.2 | 1.2±0.15                   | 10                                | 6.8~9.8    | 5V                        |
| 640-0355-4 | IC6A-136PF-DSL-EJA-G | 2.2                  | 5.7 | 11.1 | 13.8 | 7.2  | 2.9 | 1.2 | 1.2±0.15                   | 12                                | 9.0~12.0   | 5V                        |
| 640-0356-7 | IC6B-136PF-DSL-EJA-G | 5                    | 8.5 | 13.9 | 16.6 | 10.0 | 2.9 | 1.2 | 1.2±0.15                   | 16                                | 11.8~15.8  | 5V                        |
| 640-0381-4 | IC6-136PL-DSL-EJA-G  | 0                    | 3.5 | 8.9  | 11.6 | 5.0  | 3.3 | 2.3 | 1.6±0.15                   | 10                                | 6.8~9.8    | 3.3V                      |
| 640-0382-7 | IC6A-136PL-DSL-EJA-G | 2.2                  | 5.7 | 11.1 | 13.8 | 7.2  | 3.3 | 2.3 | 1.6±0.15                   | 12                                | 9.0~12.0   | 3.3V                      |
| 640-0383-0 | IC6B-136PL-DSL-EJA-G | 5                    | 8.5 | 13.9 | 16.6 | 10.0 | 3.3 | 2.3 | 1.6±0.15                   | 16                                | 11.8~15.8  | 3.3V                      |
| 640-0384-2 | IC6-136PL-DSL-EJA-G  | 0                    | 3.5 | 8.9  | 11.6 | 5.0  | 2.9 | 2.3 | 1.2±0.15                   | 10                                | 6.8~9.8    | 3.3V                      |
| 640-0385-5 | IC6A-136PL-DSL-EJA-G | 2.2                  | 5.7 | 11.1 | 13.8 | 7.2  | 2.9 | 2.3 | 1.2±0.15                   | 12                                | 9.0~12.0   | 3.3V                      |
| 640-0386-8 | IC6B-136PL-DSL-EJA-G | 5                    | 8.5 | 13.9 | 16.6 | 10.0 | 2.9 | 2.3 | 1.2±0.15                   | 16                                | 11.8~15.8  | 3.3V                      |

**NOTES:**

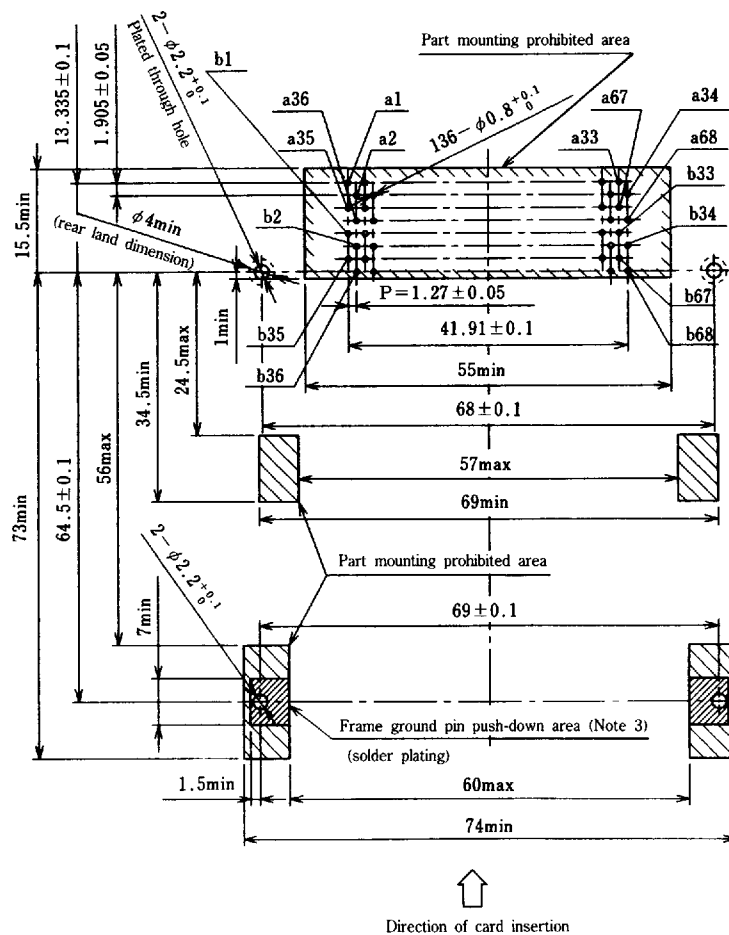
- 1 Table 1 shows the mount side pin length.
- 2 The applicable range for the indicated dimensions ( $54.2^{+0.1}_{-0.05}$ ,  $3.5^{+0.1}_{-0.05}$ ) is 10mm from the base.
- 3 The frame ground pin on these connectors is pressed against the board using screws at the frame ground pin area. Thus, it should be securely fastened from the bottom of the board using two screws (M2 × 0.4), as shown in the example below. Screw length should be selected so that the screw protrudes 9 to 12mm from the surface of the board.
- 4 When cards are inserted, the card in the lower slot is ejected by pressing the right eject button, the card in the upper slot by pressing the left eject button.
- 5 The codes (a1, a35, b1, b35, etc.) on the connector and backboard dimensions diagrams indicate the pin numbers, "a\*\*" for the upper slot, "b\*\*" for the lower slot.
- 6 The recommended screw length indicated on the diagram is for when tightening with screws. For other cases, select the H value.



Example of screw tightening (recommended) (Note 3)

- 7 "3.3" is also indicated for types with a 3.3V power supply voltage.

**PCB Layout (Standard type: mounted side)**



**Note:** The type without standoffs does not permit the mounting of parts under any of its area.