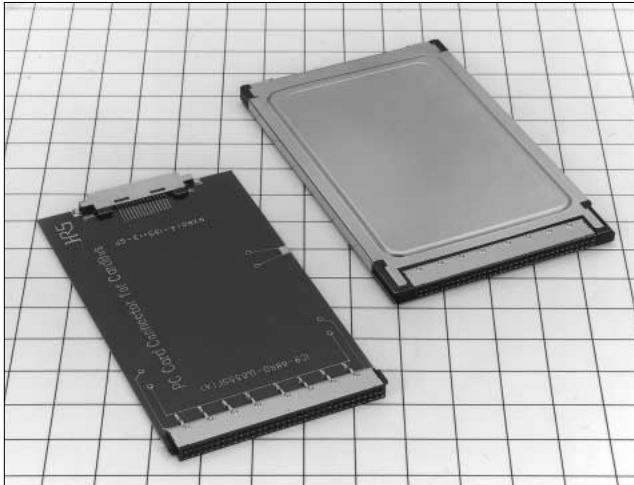


Card Bus Socket Connectors

IC9 Series



■Features

1. Compliant with PC Card Standards

Complies with latest requirements of PC Card Standard.

2. Repairable

Repairable terminations of connector solder joints after installation on the board.

3. Lead Offset

Available with two board mounting levels of terminations, to allow use of different height components.

■Product Specifications

| | | | | | | |
|---------|----------------|----------|-----------------------|------------------------------------|---------------------|-------------------------|
| Ratings | Current rating | 0.5 A | Operating temperature | -55°C to +85°C (Note 1) | Storage temperature | -10°C to +60°C (Note 2) |
| | Voltage rating | 125 V AC | Operating humidity | 95% R.H. or less (No condensation) | Storage humidity | 40 to 70% (Note 2) |

| Item | Specification | Conditions |
|--------------------------------------|--|--|
| 1. Insulation resistance | 1000M ohms min. | 500 V DC |
| 2. Withstanding voltage | No flashover or insulation breakdown. | 500 V AC / 1 minute |
| 3. Contact resistance | 40 mΩ max. (initial value) | 1 mA |
| 4. Vibration | No electrical discontinuity of 100ns or more | Frequency: 10 to 2000 Hz, single amplitude of 0.75 mm or acceleration of 147 m/s ² (peak), 4 hours in each of the 3 directions. |
| 5. Humidity (Steady state) | Insulation resistance: 100 MΩ min. | 96 hours at temperature of 40°C and humidity of 90% to 95% |
| 6. Temperature cycle | No damage, cracks, or parts looseness. | -55°C, 30 min→15 to 30°C, within 5 min→85°C30 min→15 to 35°C, within 5 min, for 5 cycles |
| 7. Durability (Insertion/withdrawal) | Change of contact resistance from the start should be 20 mΩ max. | 10000 cycles at 400 to 600 cycles per hour |
| 8. Resistance to soldering heat | No deformation of components affecting performance. | Reflow: At the recommended temperature profile |
| | | Manual soldering: 300°C for 3 seconds |

Note 1: Includes temperature rise caused by current flow.

Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non- conducting condition of installed connectors in storage, shipment or during transportation.

■Materials

| Part | Material | Finish | Notes |
|--------------|-----------------|---|---------|
| Insulator | PA | Black | UL94V-0 |
| Contact | Phosphor bronze | Contact Area : gold plating Lead Area : solder plating | — |
| Ground plate | Brass | Contact Area : gold plating Lead Area : solder plating | — |

■ Ordering Information

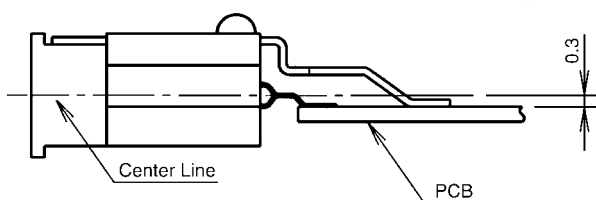
IC9 - 68 R D - 0.635 SFA

① ② ③ ④ ⑤ ⑥

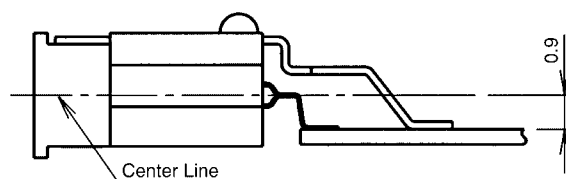
| | |
|---|--|
| ① | Series name : IC9 |
| ② | Number of contacts : 68 |
| ③ | R : card connector |
| ④ | D : 2-row alignment |
| ⑤ | Lead pitch : 0.635 mm |
| ⑥ | Offset type SF : 0.3 mm offset SFA : 0.9 mm offset |

◆ Lead Offset

● Type with 0.3 mm offset

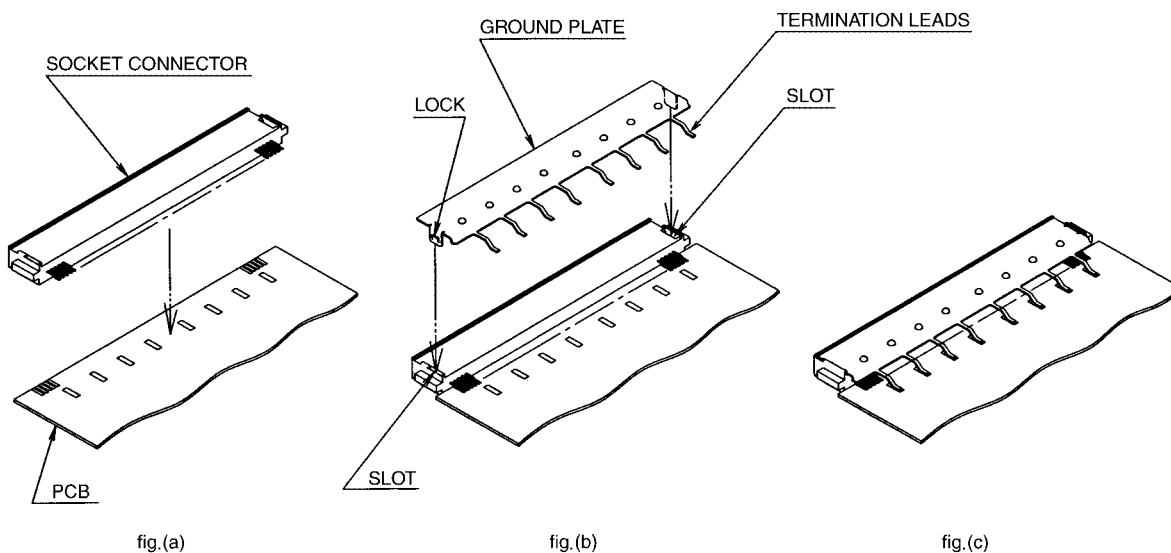


● Type with 0.9 mm offset

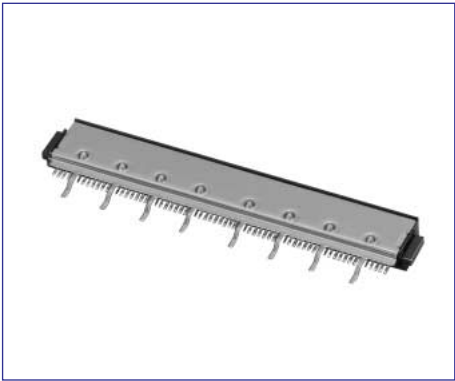


◆ Mounting Method

1. Place and solder the connector without the ground plate as shown in fig.(a).
2. Place the ground plate over the connector as shown in Fig.(b), making sure that the locking tabs are correctly aligned with the slots on both sides of the insulator. Press firmly at both ends to assure secure lock.
Note: Care should be taken that the termination leads of the ground plate are not deformed or damaged during this operation.
3. Solder the termination leads of the ground plate to the board.

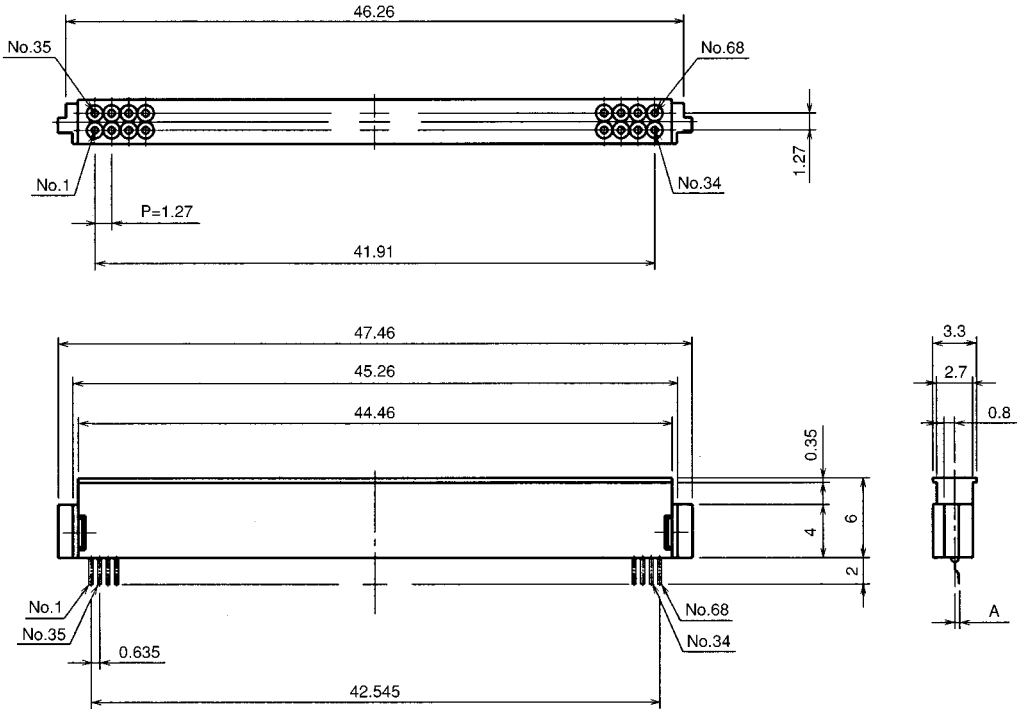


■ Card Connectors

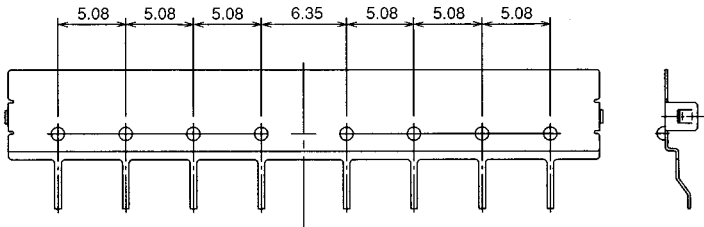


| Part Number | CL No. | A |
|-------------------|------------|-----|
| IC9-68RD-0.635SF | 640-0901-2 | 0.3 |
| IC9-68RD-0.635SFA | 640-0902-5 | 0.9 |

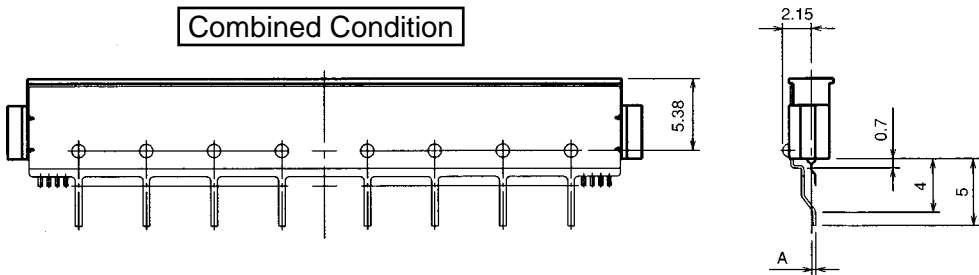
Socket Connector



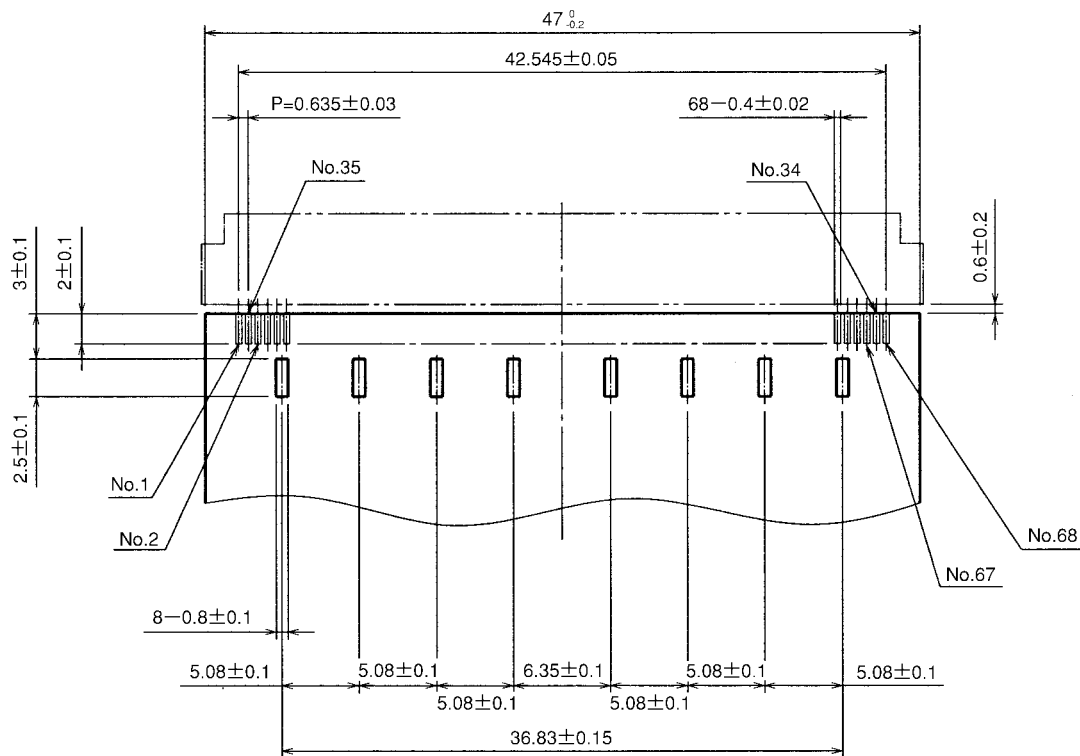
Ground Plate



Combined Condition

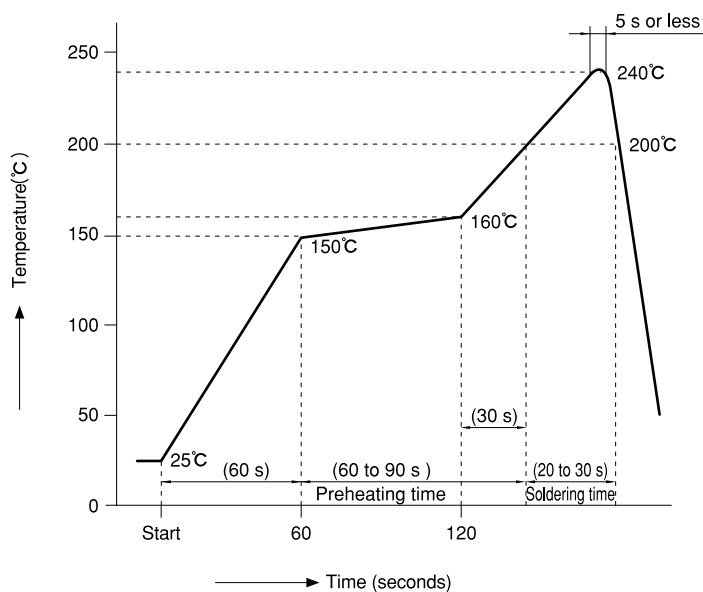


◆PCB mounting pattern



● Recommended board thickness 0.4 to 0.5mm

◆Temperature Profile



Applicable Conditions

Reflow system : IR reflow

Solder : Paste type 63 Sn/37 Pb
(Flux content 9 wt%)

Test board Glass epoxy 60mm x 60mm x 1.6 mm

Metal mask thickness: 0.15 mm

Recommended temperature profile.

The temperature may be slightly changed according to the solder paste type and amount.