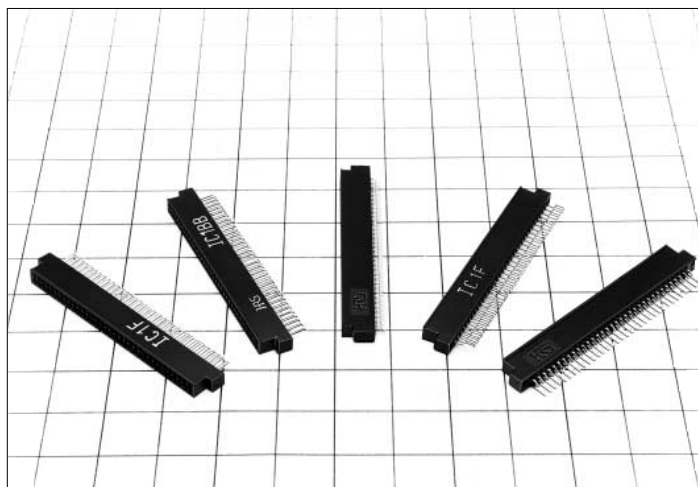


PC Card Socket Connector Complies with PC card Standard

IC1 Series



■Features

1. Compliant with PC Card Standards

Polarized entry prevents wrong insertion into a corresponding connector. And sequential contact engagement prevents electrostatic discharge, avoiding possible damage to sensitive board circuits.

2. Suited to Automatic Mounting

Packaged for a board placement with automated equipment.

3. Lead Offset

Available with several board termination levels, to allow use of different height board components.

In relation to the center line of connector, -0.2 mm, +0.3 mm, +0.55 mm, +0.9 mm and terminations on board center are available.

■Product Specifications

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

| Item | Specification | Conditions |
|---|--|--|
| 1. Insulation resistance | 1000MΩ 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) (Note 3) | 1 mA |
| 4. Vibration | No electrical discontinuity of 100ns or more | Frequency: 10 to 2000 Hz, single amplitude of 1.52 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°C, 30 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 | Remarks |
|-----------|--|---|---------|
| Insulator | PPS | Color : Black | UL94V-0 |
| Contact | IC1K, IC1HA: Phosphor bronze Others: Beryllium copper | Contact Area : gold plating Lead Area : solder plating | — |

Ordering Information

IC1 F - * R D - 1.27 SH

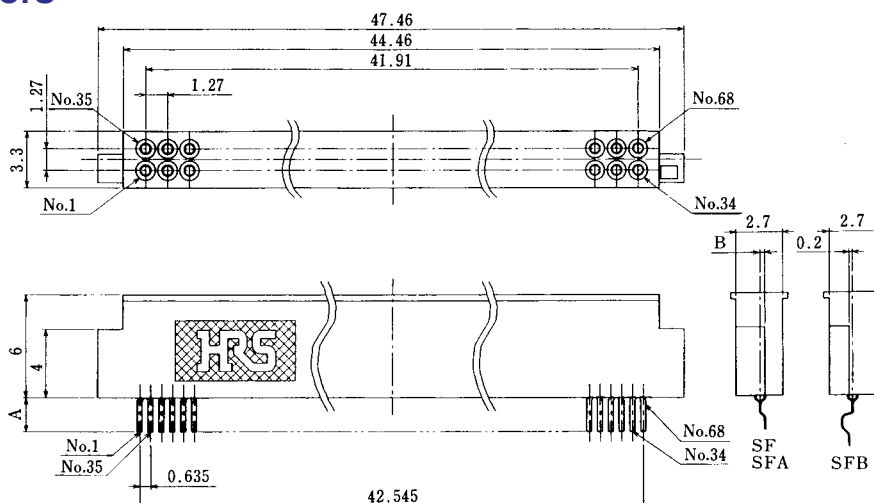
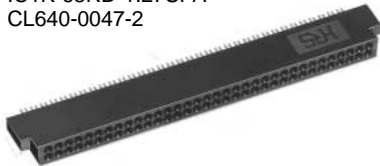
① ② ③ ④ ⑤ ⑥ ⑦

| | | |
|---|--------------------------------------|----------------------------|
| ① | Series name : IC1 | |
| ② | BB: Compliant with PC Card Standards | Connector thickness: 2.8mm |
| | F: Compliant with PC Card Standards | Connector thickness: 2.7mm |
| | HA: Compliant with PC Card Standards | Connector thickness: 2.7mm |
| | Lead offset type | |
| | K: Compliant with PC Card Standards | Connector thickness: 2.7mm |
| | Suited to automatic mounting | |
| ③ | Contacts: 40, 68 | |
| ④ | R: Card Connector | |
| ⑤ | D: 2-row arrangement | |
| ⑥ | Contact pitch: 1.27mm | |
| ⑦ | Mounting method | |
| | SH: Two sided board terminations | |
| | SHA: Two sided board terminations | |
| | SF: Single surface mount type. | |
| | SFA: Single surface mount type. | |
| | SFB: Single surface mount type. | |

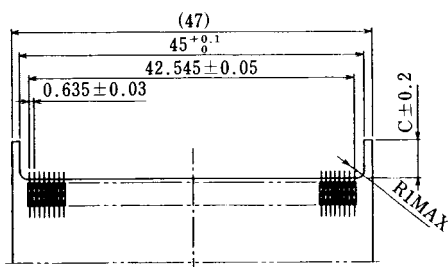
68 Contacts Card Connectors

- Connector thickness : 2.7mm
- Lead offset type
- Suited to automatic mounting
- Single surface mount type

IC1K-68RD-1.27SFA
CL640-0047-2



PCB mounting pattern



Unit:mm

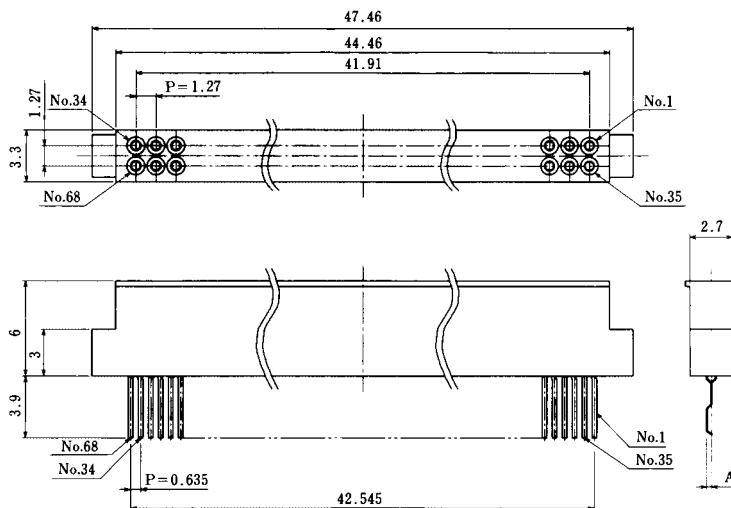
| Part Number | CL No. | A | B | C |
|-------------------|------------|---|-----|---|
| IC1K-68RD-1.27SF | 640-0046-0 | 2 | 0.3 | 5 |
| IC1K-68RD-1.27SFA | 640-0047-2 | 2 | 0.9 | 5 |
| IC1K-68RD-1.27SFB | 640-0048-5 | 3 | — | 6 |

■68 Contacts Connector

- Connector thickness:2.7mm
- Single surface mount type

Compliant with PC Card Standard

IC1F-68RD-1.27SF
CL640-0035-3



Unit:mm

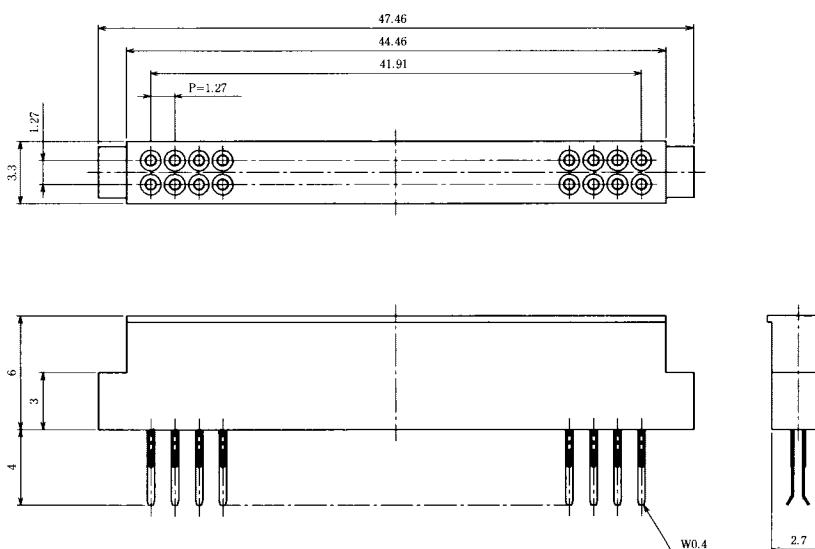
| Part Number | CL No. | A |
|-------------------|------------|-------|
| IC1F-68RD-1.27SF | 640-0035-3 | 0.3 |
| IC1F-68RD-1.27SFA | 640-0040-3 | 0.854 |

■68 Contacts Connector

- Connector thickness:2.7mm
- Two sided board termination on the center line

Compliant with PC Card Standard

IC1F-68RD-1.27SH
CL640-0013-0



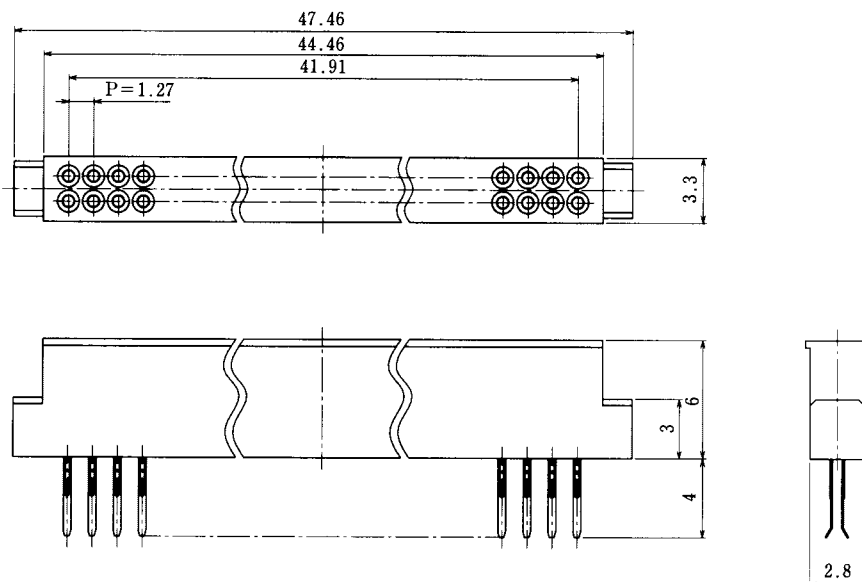
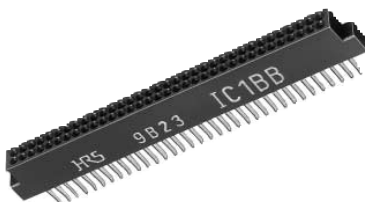
- Recommended board thickness : 0.4 to 0.5mm

■68 Contacts Connector

- Connector thickness:2.8mm
- Two sided board termination on the center line

Compliant with PC Card Standard

IC1BB-68RD-1.27SH
 CL640-0036-6



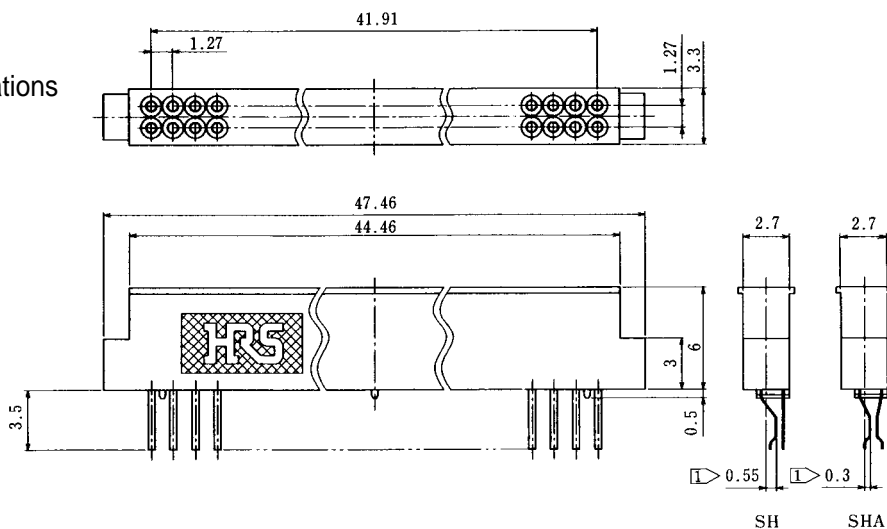
• Recommended board thickness : 0.4 to 0.5mm

■68 Contacts Connector

- Connector thickness:2.7mm
- Two sided board terminations
- Two Mounting levels of board terminations

Compliant with PC Card Standard

IC1HA-68RD-1.27SH
 CL640-0044-4



• Recommended board thickness : 0.4 to 0.5mm

① For 0.45mm board thickness

| Part Number | CL No. |
|--------------------|------------|
| IC1HA-68RD-1.27SH | 640-0044-4 |
| IC1HA-68RD-1.27SHA | 640-0045-7 |