

45-circuit PC card connectors



Because of their greater information content, PC cards are used instead of conventional magnetic cards in a wide variety of modern electronic equipment. The growing electronics industry, however, needs even thinner memory cards. To meet this need, JST has developed the innovative connector which has 45 single in-line circuits on 1.0mm (0.39") pitch and a dependable, two-piece construction. Its socket is merely 1.7mm (.067") thick, making it possible to design a memory card as thin as 2.0mm (.079"). The ICM connector requires only 2.0kgf (4.4 lbs) of insertion force, withstands up to 10,000 mating cycles, and is thus ideal for all memory card applications.



Features -

• Low insertion/withdrawal force, secure contact mating and superior durability

The socket contact has three contact points; a dimple and twin beams of different lengths. Although the ICM connector has 45 circuits, it can be mated



with just 2.0kgf (4.4 lbs) of force. The ICM connector is highly resistant to prying forces when being mated or unmated and is guaranteed for 10,000 mating cycles.

• Fully protected against static electricity and built to prevent misinsertion

The power supply pins are longer than the signal pins on the header. This ensures that they mate first and thus protect the IC chips from static electricity. In addition, the right and left card guide grooves of the header housing are shaped differently and therefore prevent misinsertion of the PC card.

Uses less gold for lower cost

Both the socket and header contacts are selectively goldplated on mating areas only.

Solder cannot enter contact mating areas

The end surface (see figure in the right) of the pressure-fit

insulator lock on the socket contact is set well inside the insulator. This prevents solder from entering the mating area when surface-mounting the socket.



Specifications

- Current rating: 0.5A AC, DC/line
- Temperature range: -40°C to +85°C
 - (including temperature rise in applying electrical current)
- Contact resistance: Initial value/35m Ω max. After environmental testing/50m Ω max.
- Withstanding voltage: 250V AC/minute
- Insulation resistance: 100M Ω min. (100V DC)
- Mating/unmating life: 10,000 cycles
- Circuits: 45-circuits
- * Contact JST for details.

Standards

- Recognized E60389
- Certified LR20812



Header / Through-hole type-



Circuits	Model No.	Q'ty / box	Material and Finish
45	ICM-A45H-SD14-1	100	Contact: Copper alloy, nickel-undercoated Mating sectionGold-plated Solder tailTin/lead-plated Insulator: Glass-filled nylon 66, UL94V-0, black Post: Brass, tin-plated

Header / SMT type



Circuits	Туре	Model No.	Q'ty / box	Material and Finish
45	Normal	ICM-A45H-ST13-4065N	160	Contact: Phosphor bronze, nickel-undercoated Mating sectionGold-plated Solder tailTin/lead-plated Housing: PPS, UL94V-0, black Reinforcing post: Brass, tin-plated –4065N1 type
	Normal with post	ICM-A45H-ST13-4065N1		
	Reverse	ICM-A45H-ST13-4065R		



Typical dimensions of PC card with Memory card connector A type (for reference)

PC board layout (viewed from component side)



Note: 1. The dimensions above should serve as a guideline. Contact JST for details.

2. Tolerances are non-cumnlative: ±0.05mm(±.002") for all centers.