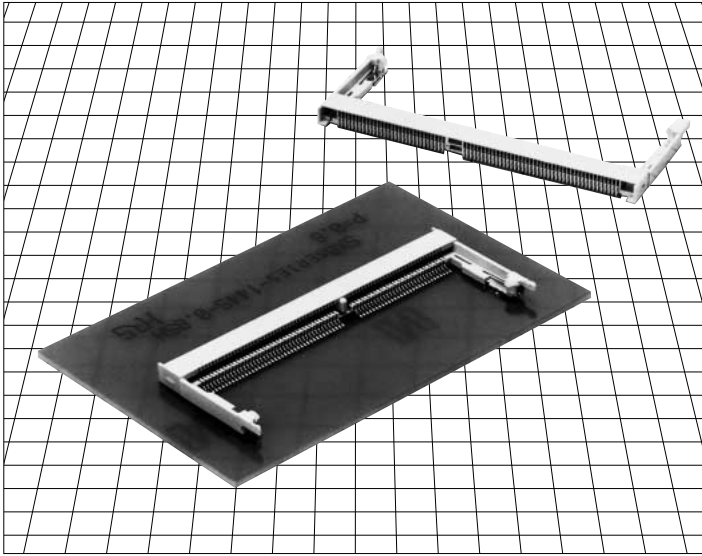


0.8mm Pitch 4mm Mounting Height S.O. DIMM Socket

SX6E Series



■ Features

1. 144pos. 8 Byte Small Outline DIMM

SX6E series is a 0.8mm pitch parallel SMT type socket applicable to 144pos. 8 Byte Small Outline DIMM standardized by JEDEC.

2. 4mm Mounting Height

This socket achieves 4mm mounting height and is designed in a small and light structure.

3. 69.6mm Socket Width

This socket achieves 69.6mm width with mold latch and reduces the prohibition area to mount the mother board.

4. Easy Insertion and Extraction of Module Board

- (1) One-touch operation to insert the module board slantly and push it downward.
- (2) Widen latches right and left, and the module board will be automatically raised. This mechanism allows easy automatic extraction.
- (3) The original mold twin-latch mechanism allows click sensible Insertion and extraction.

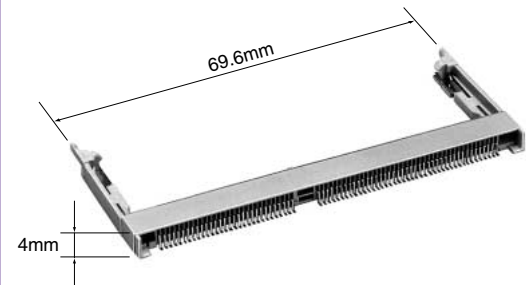
5. Solder Reparability

Considering solder reparability, the contact SMT is designed so as to widen the insulation case interval.

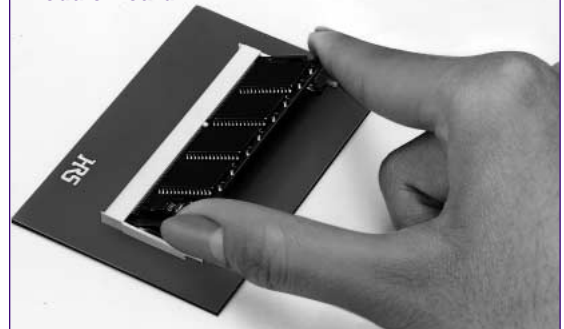
■ Applications

Note PC, business equipment, measuring instruments, telecommunication equipment, medical equipment, FA, game appliances, EWS

4mm Mounting Height, 69.6mm Width Socket



Easy Insertion and Extraction Operation of Module Board



■Product Specifications

Rating	Current rating	-55°C+85°C	Operating Humidity Range -55°C to +85°C
	Voltage rating	25V AC	
	Operating Temperature Range	0.3A	

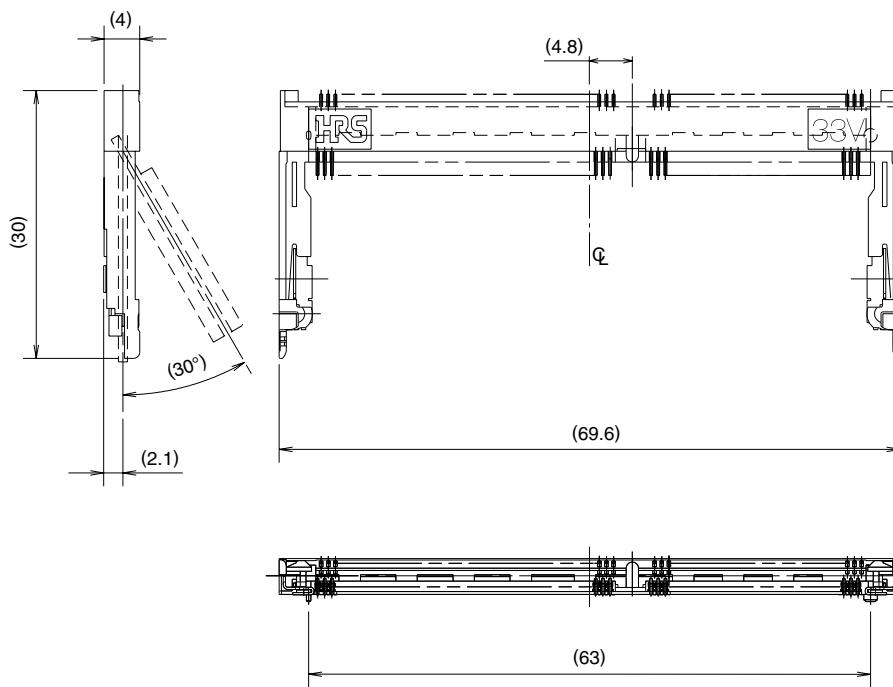
Item	Specification	Condition
1. Contact Resistance	35m ohms min.	100mA DC
2. Insulation Resistance	1000M ohms min.	250V DC
3. Withstanding voltage	No flashover or insulation breakdown.	250V AC / 1 minute
4. Durability (Insertion/withdrawal)	Contact resistance: 55m ohms max. No damage, cracks, or parts looseness.	30 cycles
5. Vibration	No electrical discontinuity of 1 μ s or more Contact resistance: 55m ohms max. No damage, cracks, or parts looseness.	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
6. Shock	No electrical discontinuity of 1 μ s or more Contact resistance: 55m ohms max. No damage, cracks, or parts looseness.	Acceleration of 490 m/s ² , 11 ms duration, sine half-wave waveform, 3 cycles in each of the 3 axis
7. Temperature Cycle	Contact resistance: 55m ohms max. Insulation resistance: 1000M ohms max. No damage, cracks, or parts looseness.	5 cycles under following conditions: Temperature : -55→ +5 to 35→ +85→ +5 to 35°C Time : 30→ 10 to 15→ 30→ 10 to 15 minutes
8. Humidity (Steady state)	Contact resistance: 55m ohms max. Insulation resistance: 1000M ohms max. No damage, cracks, or parts looseness.	96 hours at temperature of 40°C and humidity of 90% to 95%
9. Salt spray	Contact resistance: 55m ohms max.	Exposed to density 5% salt water for 48 hours

■Material

Part	Material	Finish
Contact	Phosphor copper	Gold plating
Insulator	LCP(UL94V-0)	
Metal fitting	Phosphor copper	Solder plating

Socket

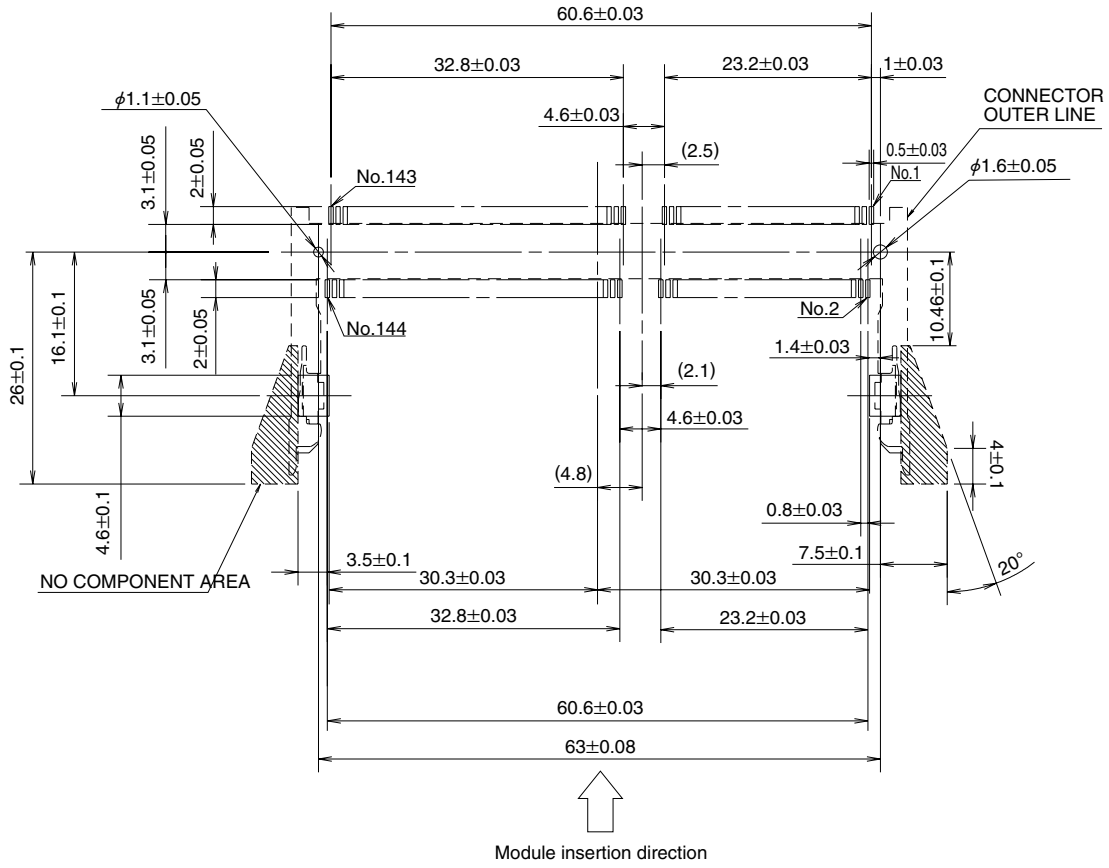
SX6E-144S-0.8SH



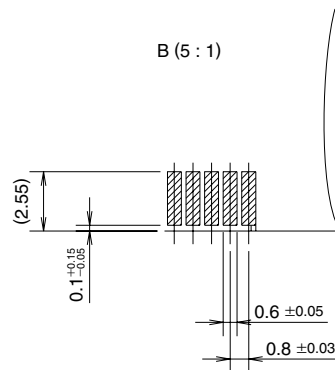
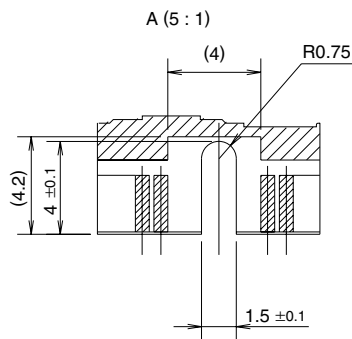
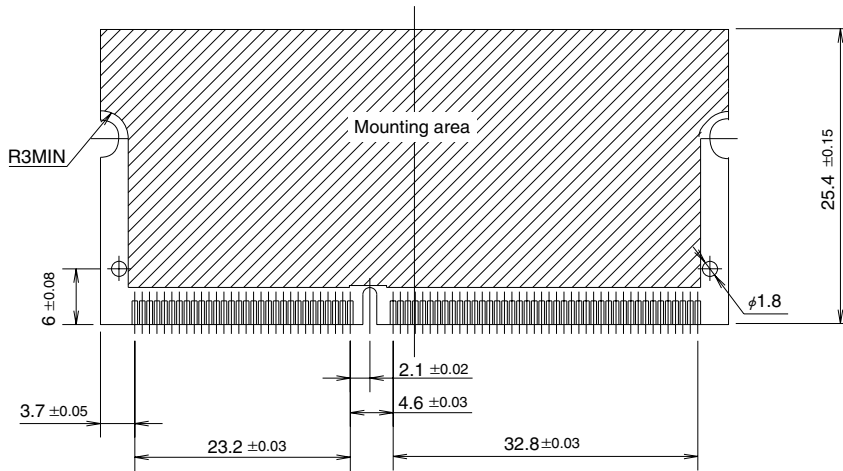
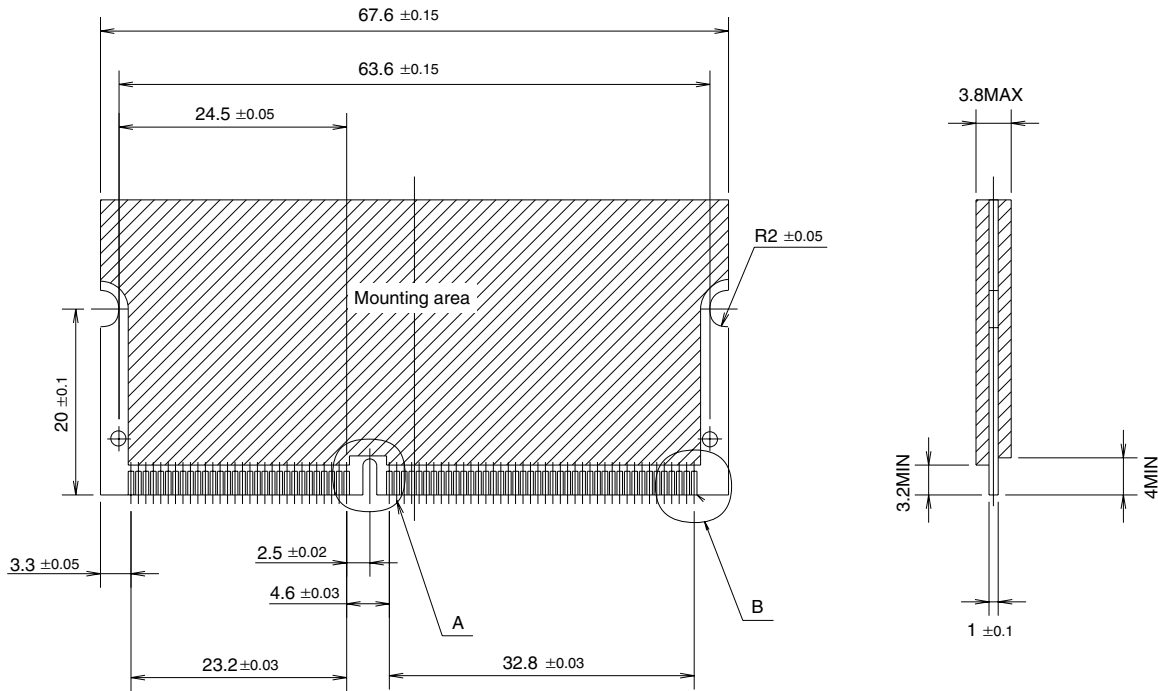
Part Number	CL No.	Number of Contacts	Key position
SX6E-144S-0.8SH(20)	530-0303-5-20	144	Right, 4.8

◆PCB mounting pattern

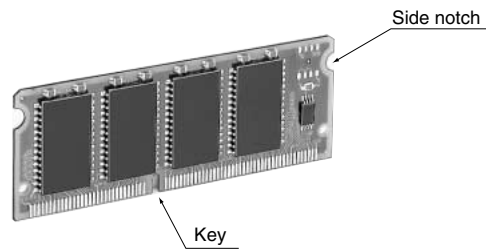
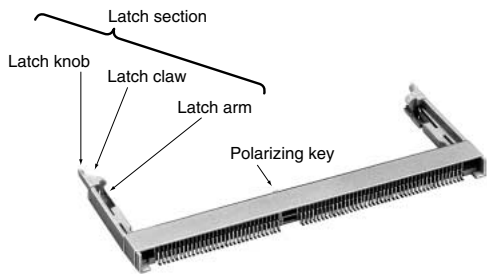
SX6E-144S-0.8SH



◆ Recommended Module Board Dimensions



◆Precautions for use



Procedures for Board Insertion

1. Adjust the socket polarizing key and the board key to the same direction.
2. Insert the board slantly. Moreover, lay the board in parallel to the opening at angle of 20° to 30° , and softly insert the board so as to hit the socket bottom. Stopping insertion halfway will result in improper insertion.
3. Applying the board side notch in parallel to the socket bottom so that the board position cannot be displaced, press the board side notch up, and fix the both socket edges to the latch area. Press the board side notch, and release the notch with a snap "click" tone, if the printed board passes through the latch claw head.

With this action, the board has been completely installed in the socket. At this time, pressing force is equivalent to the extent of turning on the electric product switch. If the stronger pressing force is needed, check whether the direction and depth to insert the board is adequate or not, and then re-push the board.

Procedures for Board Extraction

Apply the thumb nail to the latch knob at both socket edges. Forcibly widen the latch knobs to right and left ways, and release the latch. Then, draw the board out along the angle where the board is raised.

Cautions

- The latch has strength enough to endure. However, if force is applied according to other operation methods instead of the Procedures for Handling Sockets, or if further force is given in the state where the module board is raised, products could be damaged. Be sure to observe the Procedures for Handling Sockets.
- The board is designed in compliance with JEDEC "Small Outline DIMM (Dual Inline Memory Module)". However, if other boards are used instead of the recommended module board, or if the mounting product is used for other devices than DRAM memory IC, troubles due to vibration or other failures could occur. If needed, consult the HRS company.
- The recommended module board pad or sharp angle edges could cause failure in contacts. Therefore, it is recommended to offset the tie-bar from the center line, set the internal pad, or remove sharp corners or burrs according to the recommended sizes.
- Don't provide the external contact surface of the module board with the convex/concave and chamfer areas at both edges. Comply with the recommended sizes.
- When the board is mounted or housing is installed, if warpage or flexure has occurred, an excessive load could cause changes in the solder bonding area and the strength. Be sure to check individual points.
- If the board is used under environments where corrosive gas is apt to occur, consult the HRS company.

Procedures for Board Insertion



Procedures for Board Extraction



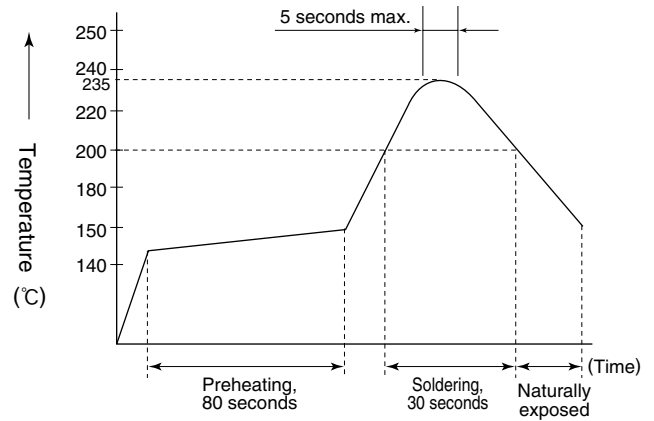
◆ Recommended Temperature Profile

● IR Reflow: Recommended Temperature Profile (Up to second reflow)

● Manual Soldering

Soldering iron temperature: $300 \pm 10^\circ\text{C}$

Manual soldering time: 3 seconds max.



● Applicable Conditions

Reflow system : IR reflow

Solder : Paste type 63 Sn/37 Pb
(Flux content 11 wt%)

Test board Glass epoxy 110mm x 85mm 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.