Correspondence to PB-free soldering

Lead-free Reflow Soldering Machine RF-630

The model RF-630 is a small Reflow Soldering Machine corresponding to lead-free soldering and using infrared radiation for the basic heating. While this is a small table-top reflow machine, it a method with six far infrared (IR) zones, and the precise and stable temperature profile required for lead-free reflow soldering can be obtained. By use of far infrared radiation, the various requirements for lead-free soldering can be met sufficiently. A max. temperature of 350°C and solder wettability are realized.

Features

- ∗ This is a table-top reflow soldering machine using infrared. Circuit boards up to 300×300 mm can be processed.
- ∗ Rapid heating is performed with a 6-zone quartz heater using far infrared radiation, and the desired temperature profile can be obtained.
- ∗ Precise temperature control (± 0.3%) up to max. 350°C and stable temperature profiles can be obtained with a high-precision PID temperature controller.

Specifications

- Heating section: 6 zones, W300mm×L780mm×H30mm (at the inlet).
  - Heater: Quartz tube heater, IR (wavelength: 2 to 10 μm).
  - Upper part: Each zone: 0.6kW
  - Lower part: 1,2,5,6zone: 0.6kW / 3,4zone: 0.3kW
  - Heating method: IR
  - Temperature control: Max. 350°C ±0.3%, P.I.D. temperature controller.
  - Temperature control for the atmosphere in the upper part of the furnace for each zone
- Conveyor: W 300 mm, SUS mesh belt. 90 to 1400 mm/min
  - Conveyor direction: R → L or L → R (at user's request)
  - Digital speed controller
- Cooling: Forced cooling by a fan on the outlet side
- Power supply: Single phase 200V About 6.7 kW, 50/60 Hz
  - 220V About 7.8 kW, 50/60 Hz
- Safety devices: Leak/Over-current circuit breaker,
  - Emergency stop switch, Alarm output
  - (over/under temperature / heater disconnection)
- External dimensions: (W) 1500×(D) 590×(H) 640 mm,
- Weight: about 140 kg.

Applicable circuit boards

- Dimensions: 15mm×15mm to 300mm×300mm
- Board thickness: 0.125mm to 2mm
- Height: Max. 30mm

Applications

- Reflow soldering of SMT circuit boards.
- Lead-free reflow soldering.
- Drying of thermosetting adhesives and other heating work.

Options

- Finger chain conveyor.
- External computer control.

∗ Specifications subject to change without notice.

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