



Soldering two connectors simultaneously to a ground plate

Objective Soldering two connectors simultaneously to a tin plated copper ground plate

Material Tin plated copper ground plate 4" x 1.75" (101.6mm x 44.45mm), 2 connectors, one with 12 pins & one with 4 pins and 60/40 solder

Temperature 650 °F (343 °C)

Frequency 321 kHz

Equipment

- Ambrell 5 kW induction heating system, equipped with a remote workhead containing two 1.0µF capacitors for a total of 0.50 µF
- An induction heating coil designed and developed specifically for this application.

Process A three turn helical coil is used to heat both sets of pins simultaneously. Power is applied for less than 20 seconds causing the solder to flow. A solder stick can be used but solder preforms work better.

Results/Benefits Induction heating provides:

- Non contact heat
- Hands-free heating that involves no operator skill for manufacturing
- Even distribution of heating



Ground plate in place for soldering of connectors

Connector with 12 pins

Connector with 4 pins