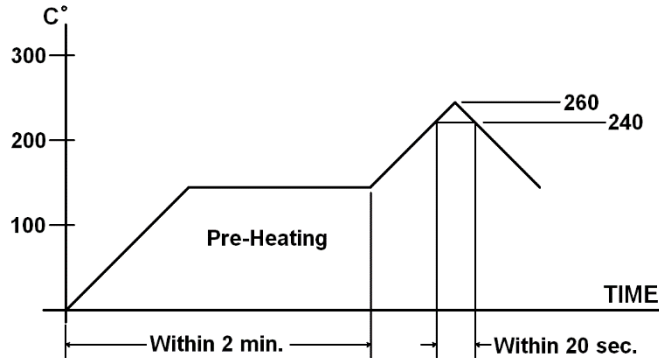


# CIT Relay & Switch Soldering Guideline – Switch

Guidelines for soldering and cleaning CIT Switch products.

SMT Temperature Profile:



**Guidelines for wave soldering:** CIT Relay & Switch recommends using a rosin-based, no-corrosive flux during any wave soldering process. The terminal area on most CIT Relay & Switch product is epoxy sealed, thus preventing flux from wicking into the inner relay cavity via the terminals. The contact path on all insert molded parts from the inner switch cavity to the tip of each terminal is irregular in shape to prevent flux migration. However, the covers, actuators, and bushings are not sealed and care should be taken to ensure that the product is not immersed or sprayed with flux during the soldering process. Good venting is also required during the wave soldering process. Flux vapors can contaminate unsealed relays by condensing on critical components including the contact area. If a cleaning process is required, care should be taken to ensure that the switches are not immersed or sprayed with any fluids or solutions.

**Preheat Temperature & Time:** Circumferential temperature of the PC board not to exceed 100°C (212°F) for 60 seconds.

**Soldering Temperature & Time:** Solder bath temperature not to exceed 260°C (500°F) for 5 seconds.

**Guidelines for Hand Soldering:** CIT Relay & Switch recommends using a no clean flux during any hand soldering process. The terminal area on most CIT SWITCH product is epoxy sealed, thus preventing flux from wicking into the inner relay cavity via the terminals. The contact path on all insert molded parts from the inner switch cavity to the tip of each terminal is irregular in shape to prevent flux migration. However, the covers, actuators, and bushings are not sealed and care should be taken to ensure that the product is not immersed or sprayed with flux during the soldering process. Good venting is also required during the wave soldering process. Flux vapors can contaminate unsealed relays by condensing on critical components including the contact area. If a cleaning process is required, care should be taken to ensure that the switches are not immersed or sprayed with any fluids or solutions.

**Hand Soldering Temperature & Time:** Recommended soldering irons not to exceed 60W. Suggested soldering temperature is 350°C. Solder and iron should contact terminals for a maximum of 5 seconds.

**CIT** RELAY & SWITCH™  
Division of Circuit Interruption Technology, Inc.