

## Soldering Process Guidelines

Sullins does not recommend specific Reflow or Wave Solder Profiles due to the variances in machines, solder paste, flux and design applications. We suggest the customer work with their flux, solder paste and/or equipment supplier to determine processing parameters.

### Hand Soldering

The soldering iron tip temperature 360°C±10°C Sn-Pb.

The soldering iron tip temperature 426°C±10°C Pb Free.

### Wave Processing

Suggested lead free wave process of typical components: 260°C for 10 seconds max.

Number of allowed Wave cycles: 2

### Reflow Processing

Based on IPC/JEDEC joint industry standard J-STD-020E

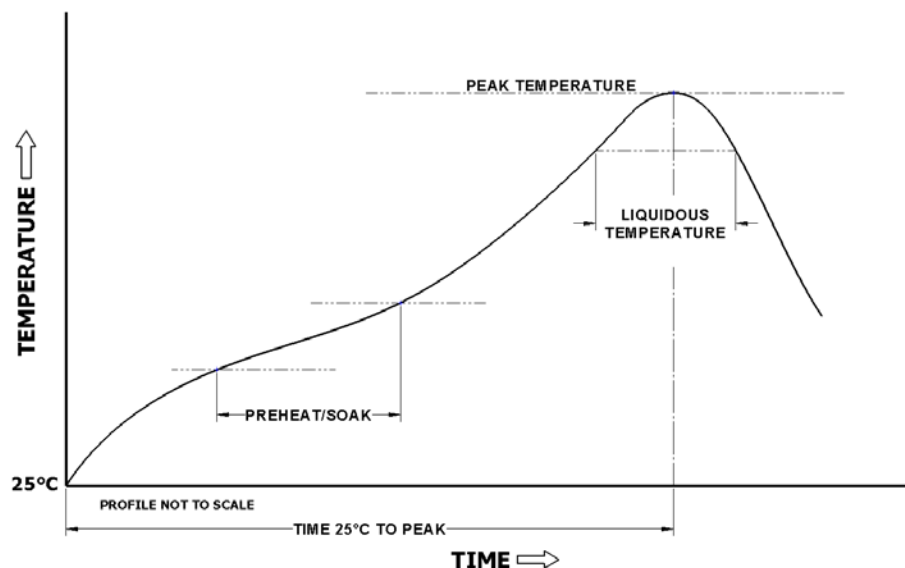
Number of allowed Reflow Cycles: 2

### Sn-Pb Eutectic Assembly

Preheat/Soak (100°C-150°C)	Max Ramp Up Rate	Reflow Time (Time above 183°C)	Peak Temperature	Time within 5°C of 235°C	Max Ramp Down Rate	Time 25°C to Peak Temperature
60-120 sec.	3°C/s max.	60-150 sec.	235°C	20 sec. max.	6°C/s max.	6 min. max.

### Pb Free Assembly

Preheat/Soak (150°C-200°C)	Max Ramp Up Rate	Reflow Time (Time above 217°C)	Peak Temperature	Time within 5°C of 260°C	Max Ramp Down Rate	Time 25°C to Peak Temperature
60-120 sec.	3°C/s max.	60-150 sec.	260°C	20 sec. max.	6°C/s max.	8 min. max.



The above guidelines should not be considered requirements for all applications. Sullins highly recommends the customer perform processing studies based on their application and equipment, to achieve the appropriate profile. Please also consult "Sullins Spinodal Handling Instructions" for critical soldering information when using Spinodal Contacts.