

Supplier : JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO.,LTD.

1. Recommend reflow soldering profile

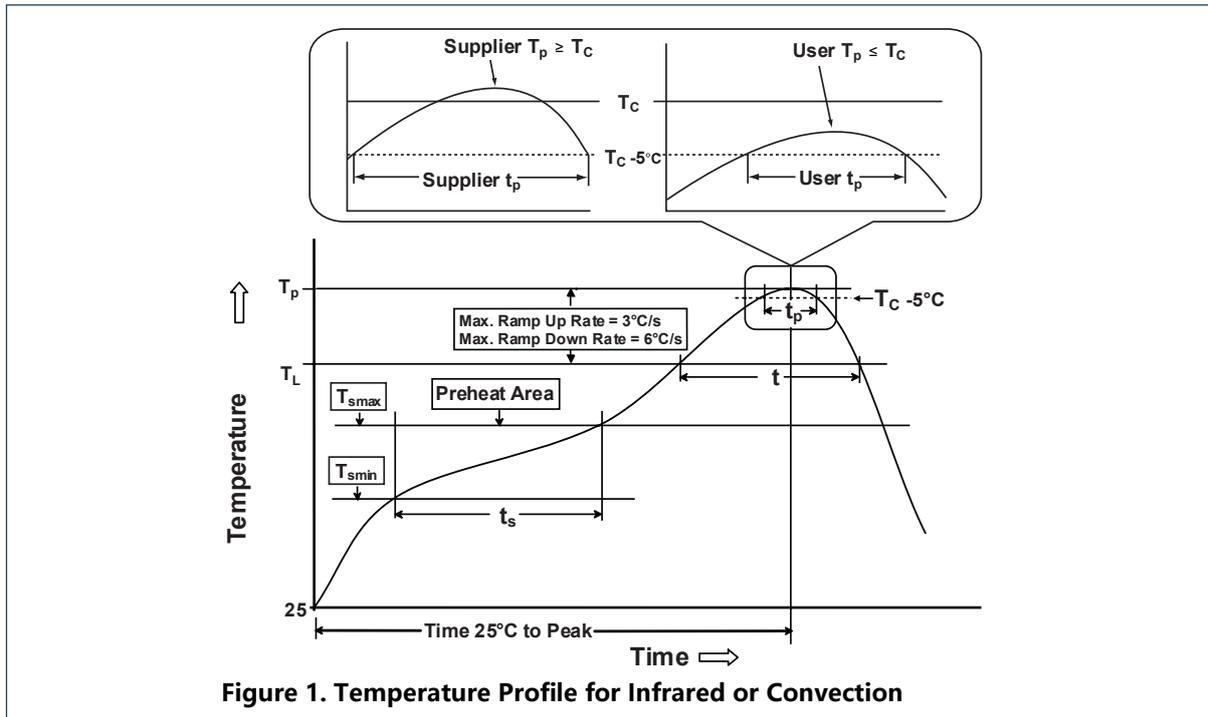


Table 1-1. Pb-Free Process - Classification Temperatures (T_C)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350 - 2000	Volume mm ³ >2000
<1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
>2.5 mm	250 °C	245 °C	245 °C

Table 1-2. Reflow Profile

Profile Feature	Pb-Free Assembly
Preheat/Soak	
Temperature Min (T _{smmin})	150 °C
Temperature Max (T _{smmax})	200 °C
Time (t _s) from (T _{smmin} to T _{smmax})	60-120 seconds
Ramp-up rate (T _L to T _p)	3 °C/second max.
Liquidous temperature (T _L)	217 °C
Time (t _L) maintained above T _L	60-150 seconds
Peak package body temperature (T _p)	T _p must not exceed the Classification temp in Table 1-1.
Time (t _p)* within 5 °C of the specified classification temperature (T _C), see Figure 1.	30* seconds
Ramp-down rate (T _p to T _L)	6 °C/second max.
Time 25 °C to peak temperature	8 minutes max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

2. Recommended wave soldering profile

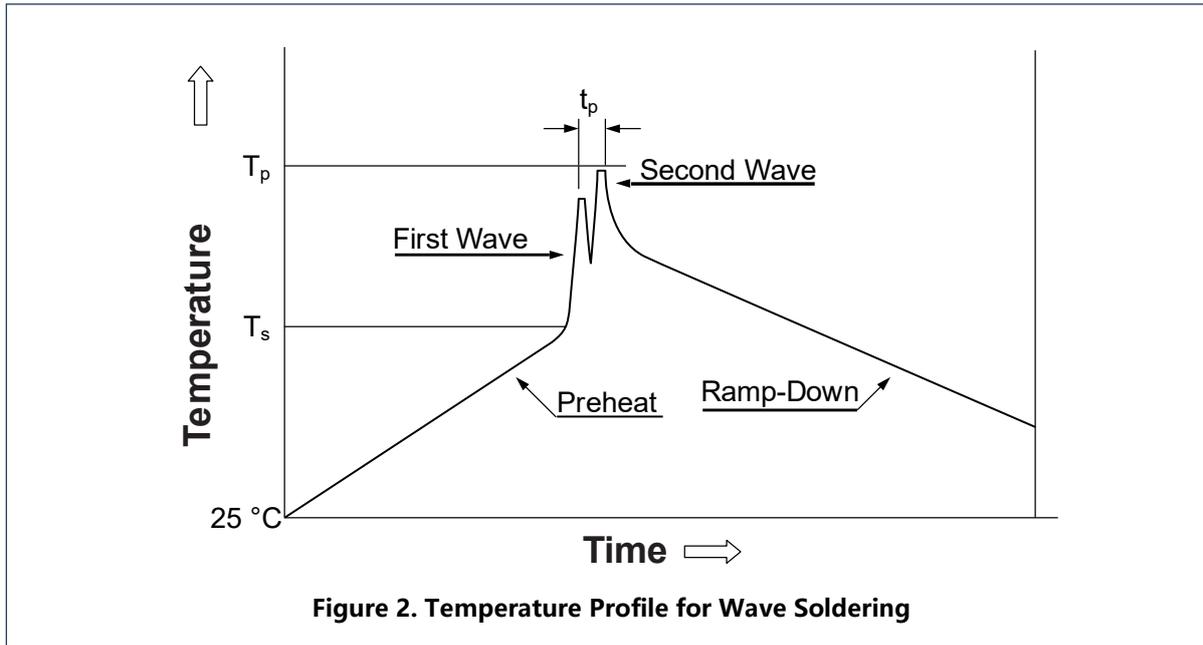


Table 2. Wave Soldering Profile

Parameter	Description	Pb-Free Assembly
Ramp-Up	Average Ramp-Up Rate	200°C/s
Heating	Heating Rate During Preheat	1 °C/s to 2 °C/s typical 4 °C/s maximum
T _s	Final Preheat Temperature	130°C
T _p	Peak Temperature	260°C
t _p	Time Within Peak Temperature	10s
Ramp-Down	Ramp-Down Rate	5 °C/s maximum

3. Manual Soldering Specification

Components must meet the requirements for manual soldering and rework processes under the following conditions:

- Soldering temperature: 350±5°C
- Duration per soldering operation: less than 3 seconds
- Recommended soldering cycles: no more than 3 times (exceeding this may risk damage to the component)