

Table 1: Recommended Reflow Profile

Profile Feature	Sn-Pb Assembly	Pb-free Assembly
Avg. ramp-up rate (T _L to T _p)	3°C/sec max	3°C/sec max
Preheat/Soak Min. Temp (T _{s_min}) Max. Temp (T _{s_max}) Time (t _s) from (T _{s_min} to T _{s_max})	100°C 150°C 60-120 seconds	150°C 200°C 60-180 seconds
Time Maintained Above Temp(T _L) Time (t _L)	183°C 60-150 seconds	217°C 60-150 seconds
Peak Package Body Temperature (T _p)	For users, T _p must not exceed the Classification temp in Table 2. For suppliers, T _p must equal or exceed the Classification temp in Table 2.	For users, T _p must not exceed the Classification temp in Table 3. For suppliers, T _p must equal or exceed the Classification temp in Table 3.
Time within 5°C of actual Peak Temp (T _p)	20* seconds	30* seconds
Ramp-down Rate (T _p to T _L)	6°C/sec max	6°C/sec max
Time Peak Temp to 25°C	6 min max	8 min max
* Tolerance for peak profile temperature (T _p) is defined as a supplier minimum and a user maximum.		

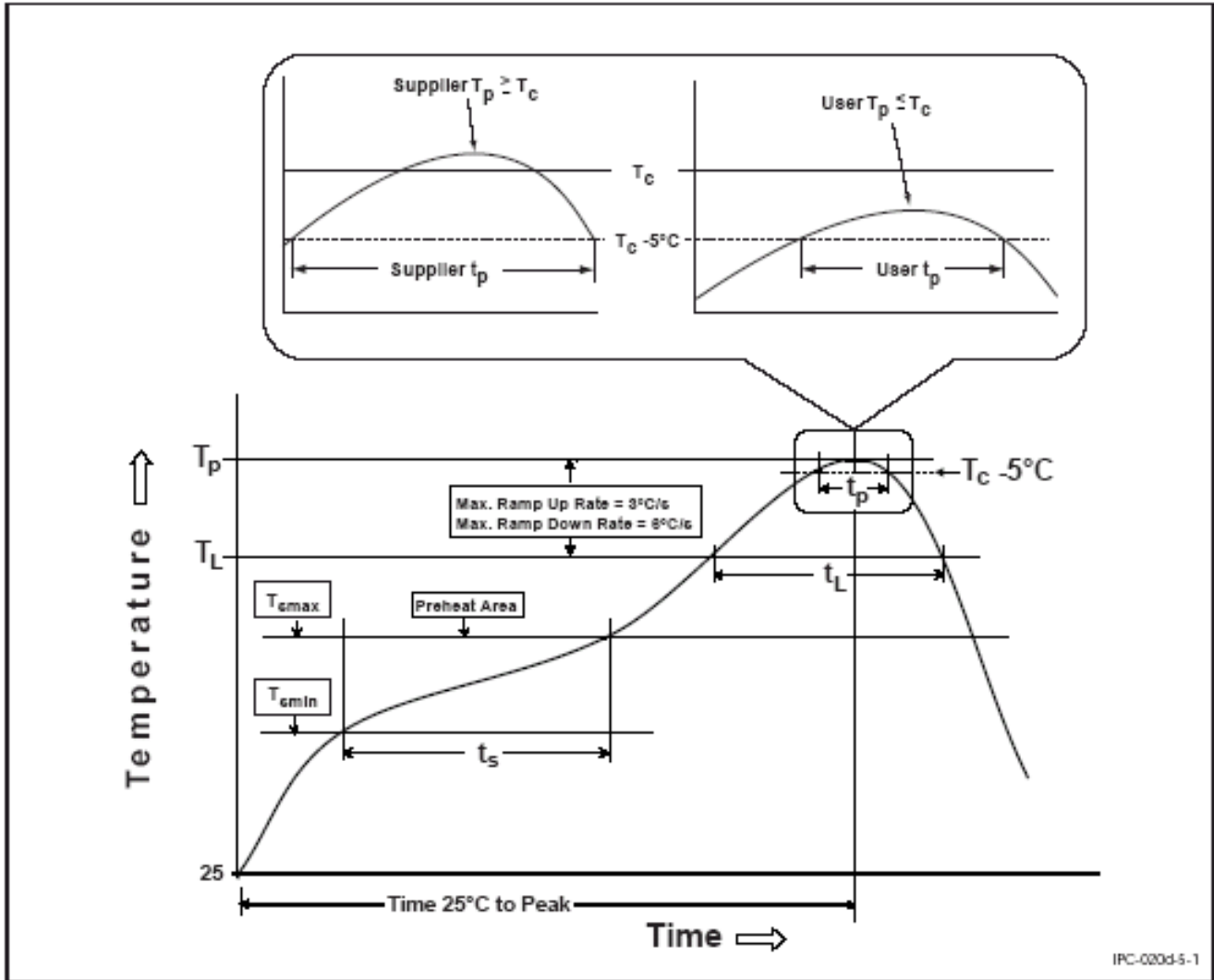
Table 2: Sn Pb Eutectic Process – Classification Temperatures (T_c)

Package Thickness	Volume mm ² <350	Volume mm ² ≥350
<2.5 mm	235 °C	220 °C
≥2.5 mm	220 °C	220 °C

Table 3: 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

Reflow Profile Chart



Revision History

Date Created	Revision	Description
Feb 07, 2018	Rev 00	New Release