

Parameter	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Ramp-up rate (T <sub>L</sub> to T <sub>C</sub> )	3°C/second max.	3°C/second max.
Temperature Min (T <sub>smin</sub> )	100°C	150°C
Temperature Max (T <sub>smax</sub> )	150°C	200°C
Time(t <sub>s</sub> ) from (T <sub>smin</sub> to T <sub>smax</sub> )	60-120 seconds	60-120 seconds
Liquidous temperature (T <sub>L</sub> )	183°C	217°C
Time (t <sub>L</sub> ) maintained above T <sub>L</sub>	60-150second	60-150seconds
Time(t <sub>p</sub> ) within 5°C of the specified Classification temperature(T <sub>C</sub> )	20 second	30 seconds
Ramp-down rate(T <sub>C</sub> to T <sub>L</sub> )	6°C/second max.	6°C/second max.
Time 25°C to peak temperature	6 minutes max.	8 minutes max.

Note1. All temperatures refer to the center or the package, measured on the package body surface that is facing up during assembly reflow.

Note2. Reflow standard specification reference IPC/JEDEC J-STD-020

Table1-1 SnPb Eutectic Process Classification Temperatures (T<sub>C</sub>)

Package Thickness	Volume mm <sup>3</sup> <350	Volume mm <sup>3</sup> ≥350
< 2.5mm	235°C +0 / -5°C	220°C +0 / -5°C
≥ 2.5mm	220°C +0 / -5°C	220°C +0 / -5°C

Table1-2 Pb-Free Process-Classification Temperatures (T<sub>C</sub>)

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

