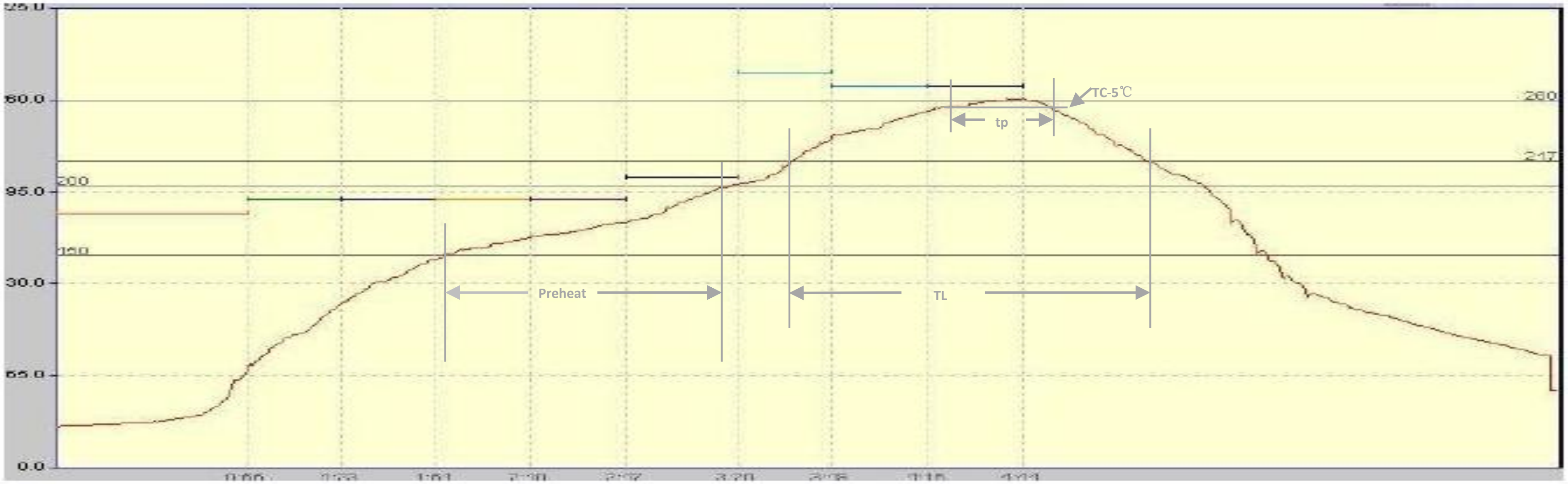
Recommended Reflow Soldering Profile

Limiting Values*

The below temperature profile for moisture sensitivity characterization is based on the IPC/JEDEC joint industry standard: J-STD-020F.

Profile Feature	Pb-free assembly(Requirement)	Actual
Preheat		
Temperature minmum(T_{smin})	150℃	150℃
Temperature maxmum(T_{smax})	200℃	200℃
Time(t_{smin} to t_{smax})	60s to 120s	115s
Time maintained above		
Temperature(T_L)	217℃	217℃
Time(t_L)	60s to 150s	111s
Peak/classification temperature(T_p)	260℃	260℃
Number of allowed reflow cycles	3	3
Time within 5℃ of actual peak temperature(T_p)	>30s	32s

* Applicable for LRC surface mounted devices.

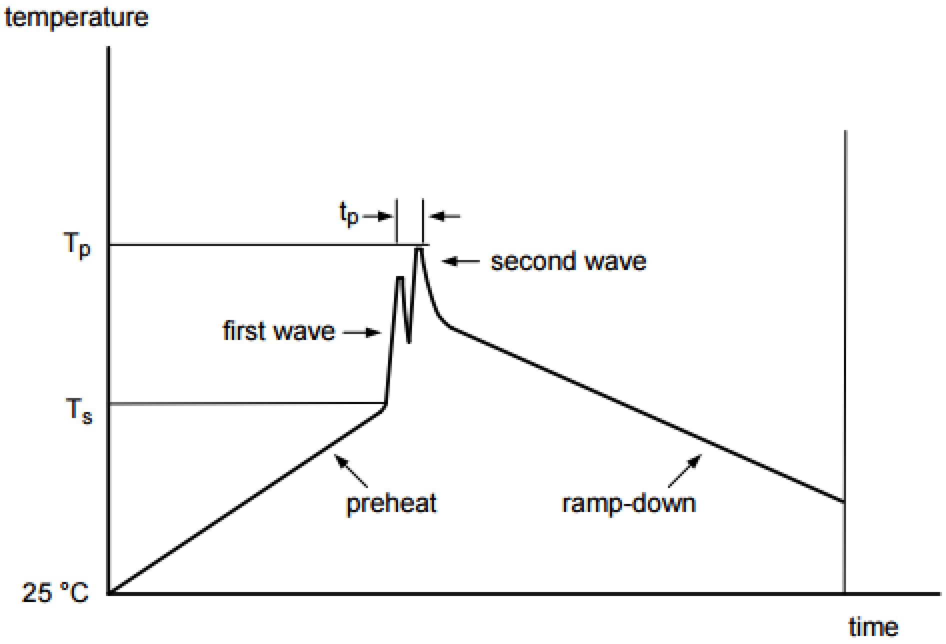


Wave Soldering Profile

Limiting Values*

Profile Feature	Pb-free assembly
Average ramp-up rate	~200℃/s
Heating rate during preheat	Typical 1-2,max 4℃/s
Final preheat temperature Heating rate temperature Ts	~130℃
Peak temperature(T_p)	260℃
Time within peak temperature(T_p)	10s
Ramp-down rate	5℃/s maximum

* Applicable for LRC through-hole devices.



Resistance to Solder heat

Surface Mount Solid State Devices:

Soldering Dip Temperature:260+5/-0, Time: 10 +/- 1seconds

Remark:

Follow JEDEC industry standard: JESD22-A111. Applicable for Surface Mount Solid State Devices.

Through-hole Devices:

SnPb solder bath temperature: 260 ℃ ± 5 ℃, Time:10 +2/-0 seconds

Pb-free solder bath temperature: 270 ℃ ± 5 ℃, Time: 7+2/-0 seconds

Remark:

Follow JEDEC industry standard: JESD22-B106D. Applicable for Through-Hole Mounted Devices.

Recommended Manual Soldering Condition

Limiting Values*

Soldering Temperature:350+/-10℃
Time: Max. 3 seconds

Note:

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