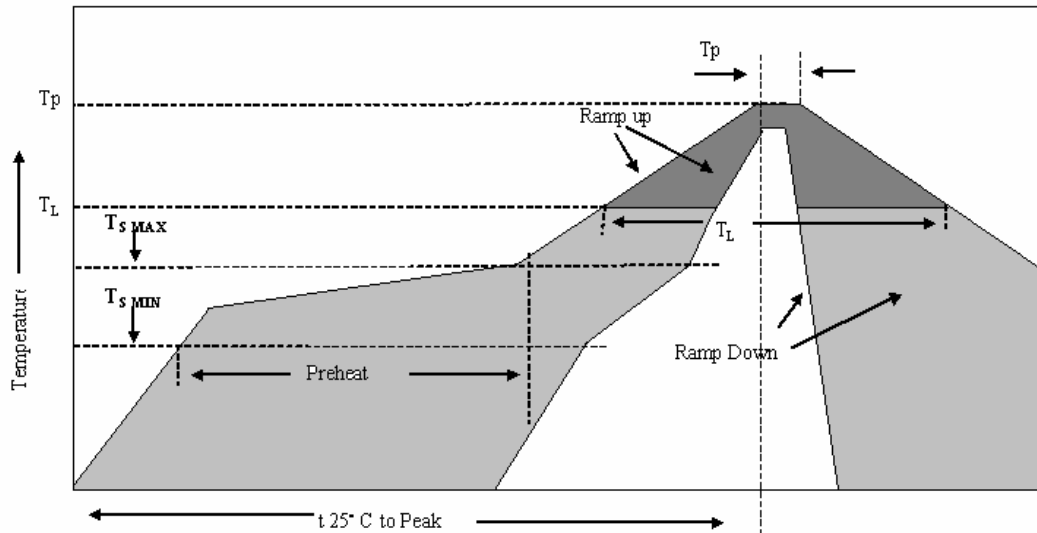




## ADVANCED POWER ELECTRONICS CORP.

### Recommended Reflow Profile for Lead(Pb) Free Soldering

Lead(Pb) free solders which require to use higher reflow temperature. Advanced Power Electronics Corp. has studied the reliability of our products at higher reflow temperature. Customer may use below temperature profile for the solders requirement.



Prepared by : Jack Lin

Confirmed by : \_\_\_\_\_

Reflow Parameter	Lead-Free Assembly
Minimum preheat temperature( $T_{s \text{ MIN}}$ )	150° C
Maximum preheat temperature( $T_{s \text{ MAX}}$ )	200° C
Preheat Time	60-180 seconds
$T_{s \text{ MAX}}$ TO $T_L$ ramp-up rate	3° C/second maximum
Time above temperature $T_L$ ( $t_L$ )	217° C 60-120 seconds
Peak Temperature ( $T_p$ )	260° C
Time 25 C To $T_p$	6 minute maximum
Time within 5c of Peak $T_p$	10-20 seconds
Ramp-down rate	4° C/second maximum