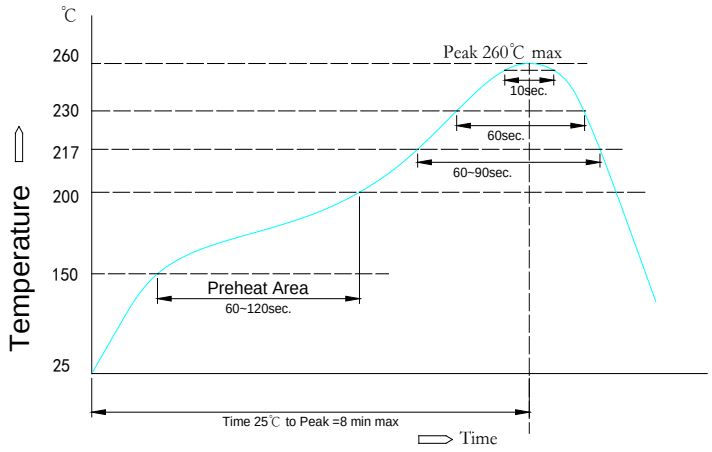
1.Reflow Soldering Heat Endurance

Reflow profile parameters

(1) Preheat condition: 150 ~200℃/60~120sec.
(2) Ramp-up rate(T_L to T_P):3℃/sec. max.
(3) Allowed time above 217℃: 60~90sec.
(4) Allowed time above 230℃: 60sec.
(5) Peak temp: 260℃
(6) Max time at peak temp: 10sec.
but for wire wound products,5sec.
(7) Ramp-down rate(T_P to T_L):6 ℃/sec max.

Recommended solder paste: Sn/3.0Ag/0.5Cu
Liquidous temperature T_L=217℃



Note：

(1) No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.

(2) 2 times reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.

(3) This reflow profile is for classification/preconditioning and are not meant to specify board assembly profiles, Actual board assembly profile should be developed based on specific process needs and board designs and **should not exceed** the parameters listed above.

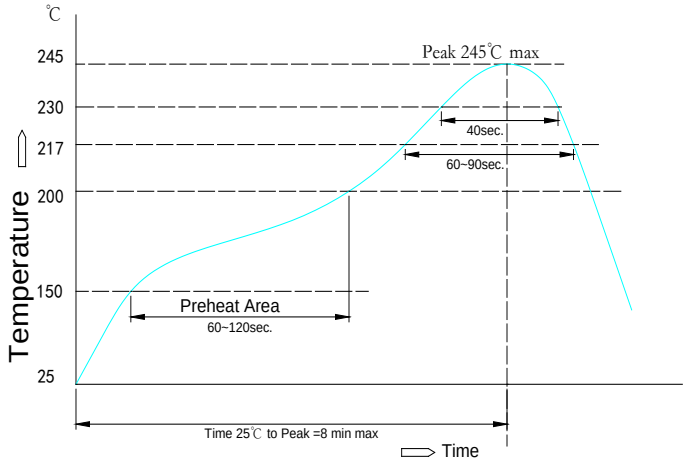
(4) The reflow test profile may vary with the testing instruments.

2. Recommended Reflow Conditions

Reflow profile parameters

(1) Preheat condition: 150 ~200℃/60~120sec.
(2) Ramp-up rate(T_L to T_P):3℃/sec. max.
(3) Allowed time above 217℃: 60~90sec.
(4) Allowed time above 230℃: 40sec.
(5) Peak temp: 245℃
(6) Ramp-down rate(T_P to T_L):6 ℃/sec. max.

Recommended solder paste: Sn/3.0Ag/0.5Cu
Liquidous temperature T_L=217℃



Note：

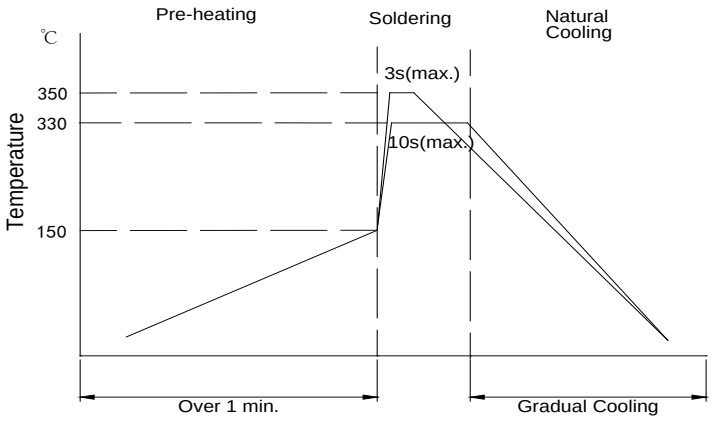
The recommended reflow profile here is for classification/preconditioning, ,Actual board assembly profile is based on the testing instruments used, **Solderability** depends on the testing equipments,reflow conditions, testing method,etc.so it is necessary to make a confirmation of them when the reflow conditions are set up.

3.Iron Soldering Profile

Profile parameters:
(1) Iron soldering power: Max. 30W
(2) Pre-heating: 150℃/60sec.
(3) Soldering Tip temperature: 350℃Max.
(4) Soldering time: 3sec. Max.
(5) Max.1 times for iron soldering

Recommended solder paste: Sn/3.0Ag/0.5Cu

Take care not to apply the tip of the soldering iron to the terminal electrodes

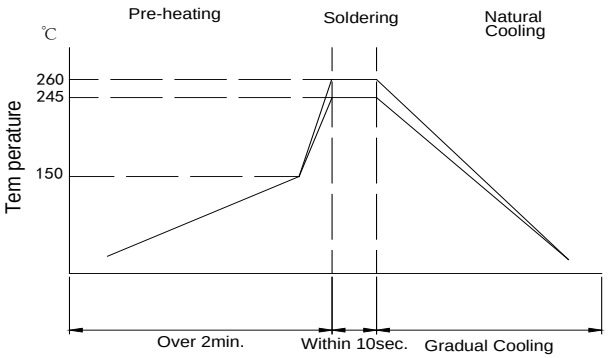


4.Wave-Soldering Profile:

Profile parameters:
(1)1~2 ℃/sec. Ramp;
(2)Pre-heating: 80~130℃/ 90±30 sec.
(3)Peak temperature: 260℃/10sec. Max.

Recommended solder paste: Sn/3.0Ag/0.5Cu

Wave soldering are not recommended for wire wound products



Wave Soldering

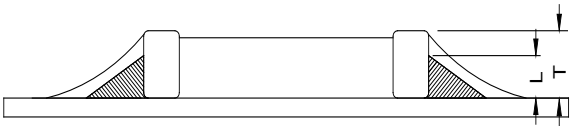
5.Heat Gun Profile

Soldering parameters
(1)Soldering tip temperature: 350℃Max.
(2)Hot air time: <5sec (over 5sec may cause wiring inductor short)
(3)When repairing or reworking the component near inductors, take over-heat protection for inductors.

6.Solder Amount

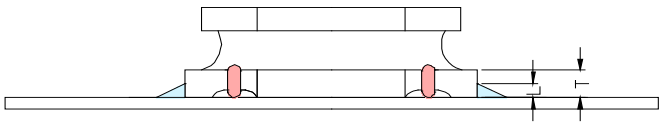
Solder shall be used not to exceed as shown below, Exceeding solder amount may cause the failure of mechanical or electrical performance(**L**:recommendable,**T**:height of electrode).

(1)For monolithic type



1/3T≤L≤1T(T: height of Electrode)

(2) For Wirewound Inductors



0≤L≤1/2T(T:height of electrode)

All specifications are subject to change without notice.