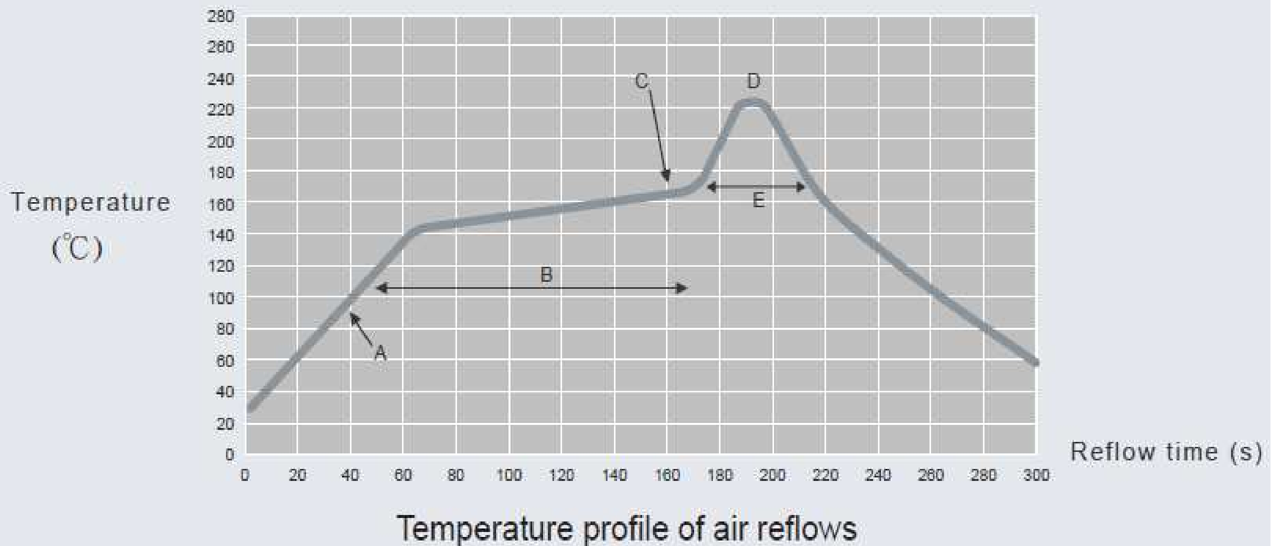
Typical Reflow Profile For Solder Paste

Type:G4 serial & G5 serial

Reflow condition

Recommended temperature profile of air reflow is shown in the following figure.



Temperature profile of air reflows

1. Preheat :

<A> Set the temperature rising speed A at rate of 1-3℃/s. Careful with rapid temperature rise in preheat zone as it may cause excessive slumping of the solder paste.

<B> Appropriate preheat time B is 60 to 120 seconds at the temperature range of 120 to 183℃. If preheat insufficiently, large solder ball tend to be generated. Conversely, if performed excessively, fine balls and large balls will generate in clusters at time.

<C> Appropriate preheat ending temperature C shall reach to 183℃, if not, non-melting tends to occur after reflow.

2. Heating :

<D> Set the peak temperature D in the range of 210 ~ 230℃. Careful of sudden rise in temperature as it may worsen the slump of the solder paste.

<E> Have the melting temperature set above 200℃ for 20 to 60 seconds.

3. Cooling:

   Avoid slow cooling as it may cause position shift of the components and decline in joining strength at times.