

reflow soldering instructions for RF module

Preface

FSK RF modules are suitable for reflow soldering in assembly process. In order to ensure that you would not cause defects or change the functions, we recommend you to follow our instruction to solder.

The Selection of the solder paste

——Sn96.5%/Ag3.0%/Cu0.5%

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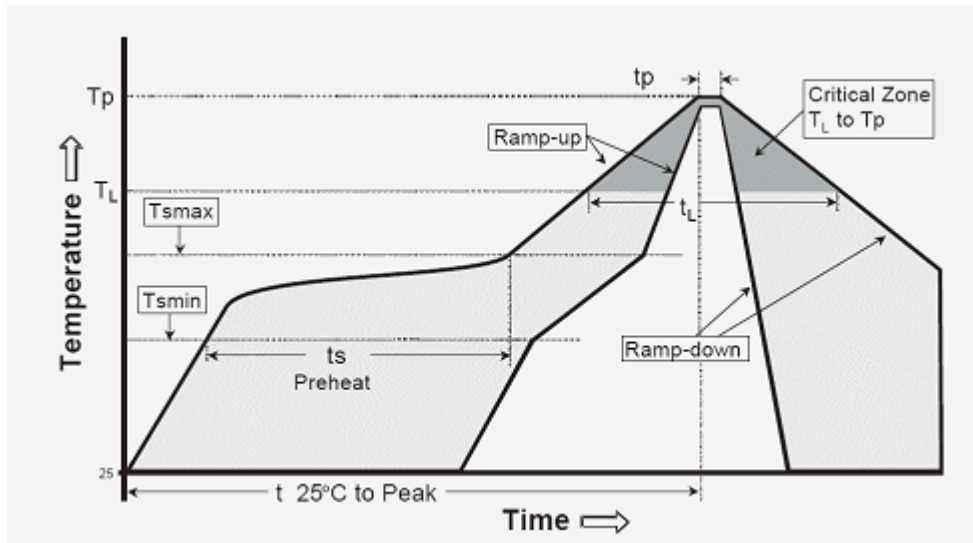
FSK RF modules are green products in complete accordance with the lead-free requirement, therefore, we suggest you to use lead-free solder paste. We recommend two alloyed solder paste as below:

——Sn96.5%/Ag3.0%/Cu0.5%

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Reflow soldering profile curve

We recommend you should obey the IPC related standards in setting the reflow profile:



IPC/JEDEC J-STD-020B the condition for lead-free reflow soldering	big size components (thickness $\geq 2.5\text{mm}$)
The ramp-up rate (Tl to Tp)	3°C/s (max.)
preheat temperature - Temperature minimum (Tmin) - Temperature maximum (Tmax) - preheat time (ts)	150°C 200°C 60~180s
Average ramp-up rate (Tmax to Tp)	3°C/s (Max.)
- Liquidous temperature (TL) - Time at liquidous (tL)	217°C 60~150 second
peak temperature (Tp)	245+/-5°C

Time at peak temperature	10~30s
Average ramp-down rate	6°C/s (Max.)
Time 25°C to peak temperature	8 minutes (Max)

注意事项

Soldering precautions

——The moisture sensitivity of lead-free solders is inferior to Sn-Pb eutectic solders. To achieve better effect in soldering and protect solder joint against oxidation, pls make reflow soldering under the protection of nitrogen.

—— When the module should be repaired in soldering, we recommend hand-soldering to avoid repetitious reflow which may cause defects.

——When the module is exposed to high humidity environment for a long time, we suggest you to bake the module before reflow soldering. Baking temperature is 80~120°C, the time is at least 2 hours.

Others

Based on the actual situations, Customers are supposed to carry out soldering technics in line with the above-mentioned instructions. If you have any questions, please refer to our website or contact our technical staff.