



Nitrogen Reflow Soldering

Best Technology utilizes state-of-the-art nitrogen reflow equipment to enhance the reflowing process, ensuring superior welding quality for our products. This cutting-edge technology allows us to achieve optimal results, surpassing industry standards. With our advanced nitrogen reflow equipment, we guarantee the highest level of product quality and reliability. Trust in our expertise to deliver exceptional performance and reliability for all your PCB soldering needs.





Specification of Nitrogen Reflow

Item	Specification
Name	Nitrogen Reflow Soldering
Part Number	SER-710NH
Working Model	Nitrogen Flush
Cooling Method	Hydrocooling
Heating Temperature Range	Room Temp~320℃
Temperature Accuracy	+/-1℃
Delivery	Dual Lane + Mesh Belt
Max PCB Width	50~570mm

Benefits of Nitrogen Reflow

- 1) Prevent/reduce oxidation for improving product quality.
- 2) Enhance soldering ability and speed up the wetting process.
- 3) Minimize solder ball generation and prevent bridging for superior soldering results.
- 4) Enhance solder joint performance and minimize discoloration, but with increased nitrogen cost.

Oxygen content can be accurately measured using an inline analyzer for nitrogen purity assurance.

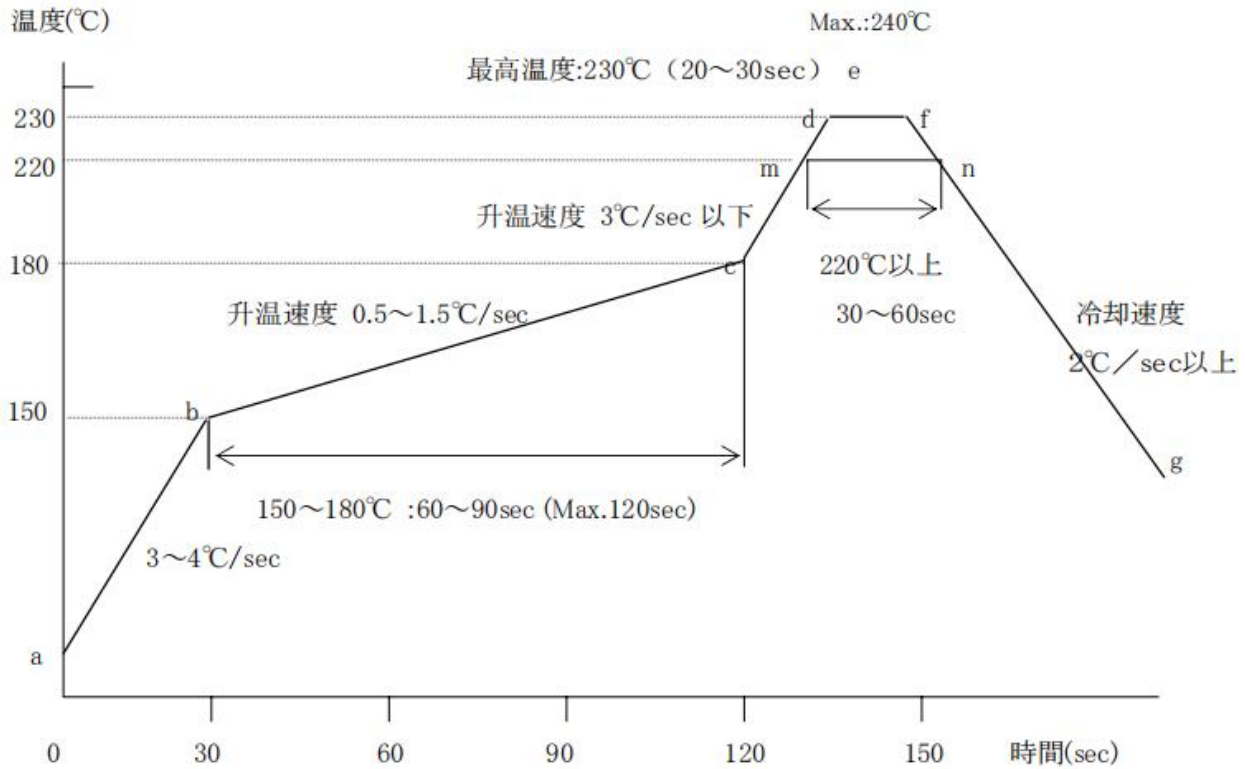
- 5) The use of nitrogen reflow can greatly increase the yield of products, improve product quality, reduce rework or maintenance costs and so on.

Specification of Nitrogen Generator

Item	Specification
Name	Nitrogen Reflow Soldering
Part Number	HN4100
Nitrogen Purity	99.99%
Nitrogen Storage	100m ³

Recommend Temperature Profile of Nitrogen Reflow

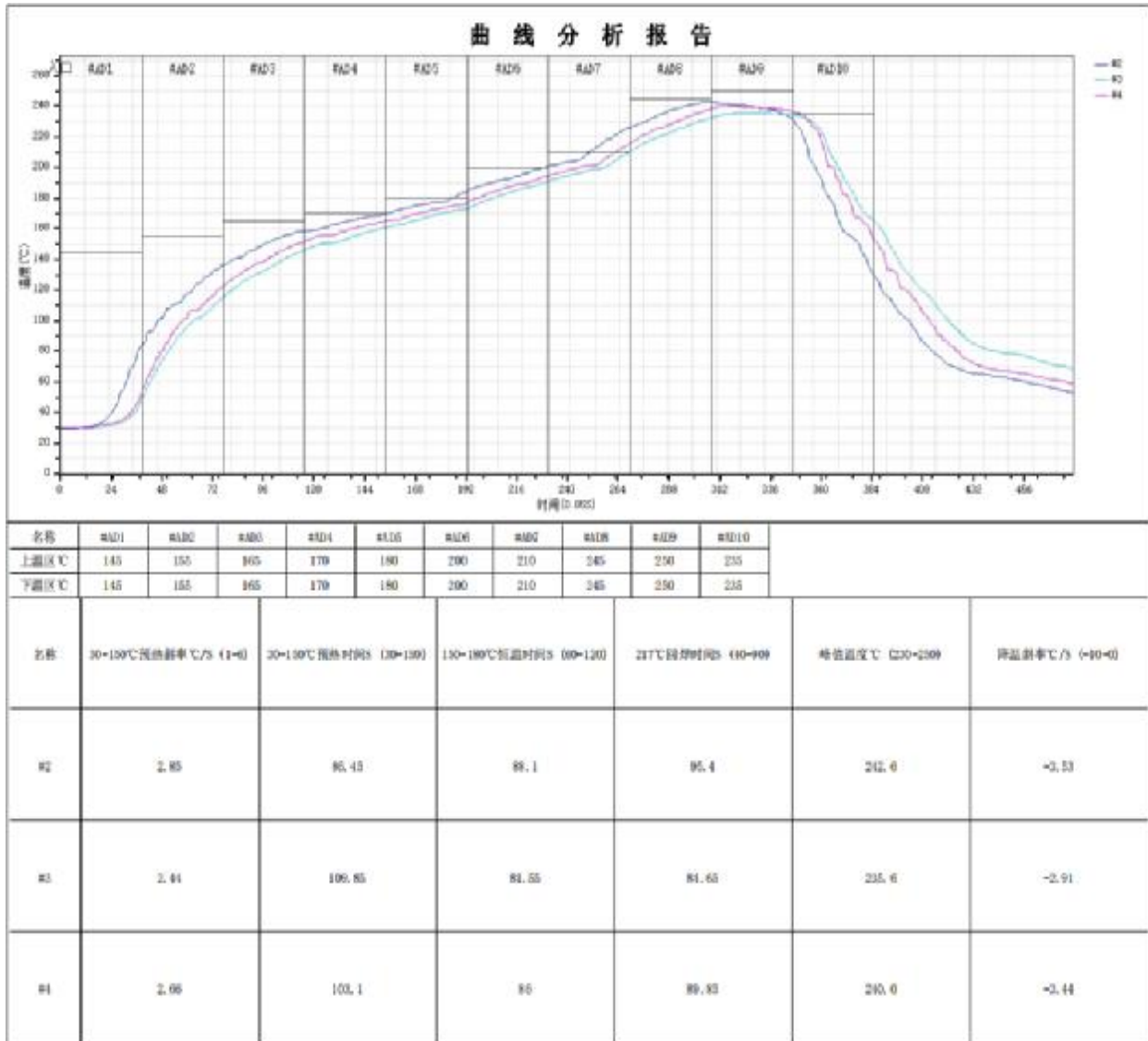
推荐温度曲线图



回流工程的温度设定

- (c-d)…升温速度(3°C/sec以下)
- (m-n)…焊料的熔融时间(220°C以上 30~60sec)
- (e)…最高温度:230°C(保持20~30sec, Max. 50sec)
- Max. 240°C
- (f-g)…冷却速度(2°C/sec以上)

Temperature Profile in Reflow Furnace



Temperature Reference Table

Temperature Reference Table												
Type (Lead-Free)	Soak Zone			Preheat Zone				Reflow Zone		Cooling Zone	Air Velocity	Conveyor Speed
	1	2	3	4	5	6	7	8	9	10		
Normal MCPCB (aluminum/copper PCB)	145	155	165	175	185	195	210	235	260	250	35	80
Aluminum PCB (with large capacitor)	145	155	165	175	185	195	210	245	265	250	35	80
Ceramic PCB ($\leq 1.0\text{mm}$)	145	155	165	175	185	195	210	235	260	250	35	80
Ceramic PCB ($\geq 1.0\text{mm}$)	145	155	165	175	185	195	210	245	265	250	35	80
FR4-PCB (without BGA)	145	155	165	175	185	195	210	240	260	250	35	80
FR4-PCB ($\leq 1.0\text{mm}$ thickness BGA)	145	155	165	175	185	195	210	245	265	250	35	80
FR4-PCB ($\geq 1.0\text{mm}$ thickness BGA)	145	155	165	175	185	195	210	245	270	250	35	80
FPC (without support fixture)	145	155	165	175	185	195	210	240	260	250	35	80
FPC (with support fixture)	145	155	165	175	185	195	210	260	275	250	35	80
Heavy copper PCB, Large component ($\geq 5\text{mm}$)	145	155	165	175	185	195	210	255	280	250	35	80
Mid-temperature solder paste	145	155	165	175	185	195	210	195	240	220	35	80