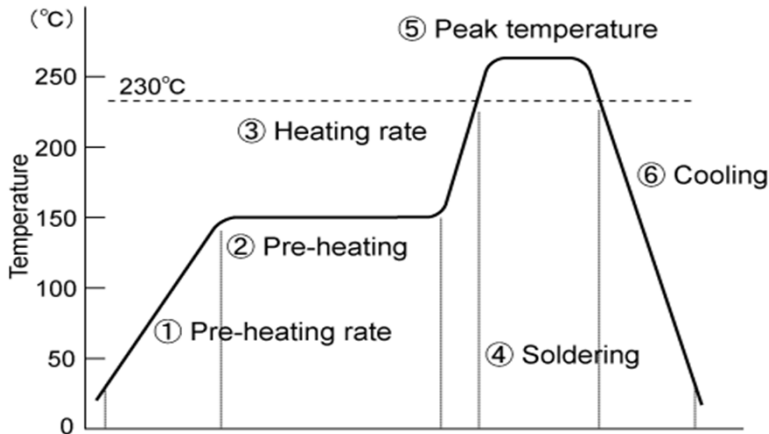


Product	Diode	Package	SOT-416FL(EMD3F)
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1. Reference Condition of Reflow Soldering



① Pre-Heating Rate	1~5°C/s
② Pre-Heating	130~170°C, 50~120s
③ Heating Rate	1~5°C/s
④ Soldering	Over 230°C, 20~30s
⑤ Peak Temperature	245~260°C, 10s Max.
⑥ Cooling	60s Min.
⑦ Number of Times	2 Times Max.

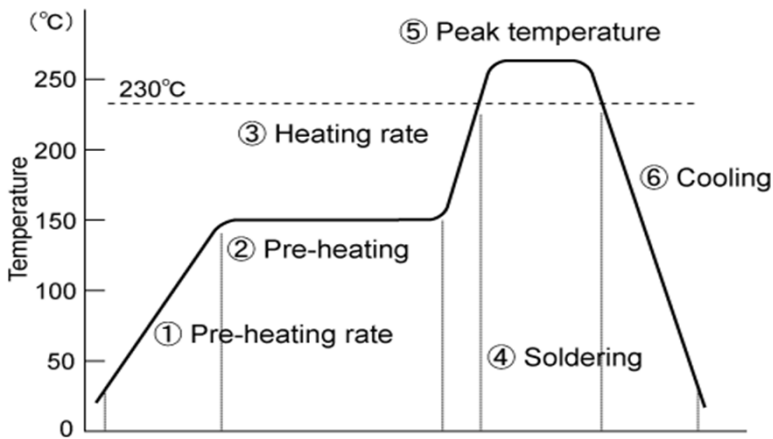
※ Recommended peak temperature is over 245°C. If peak temperature is below 245°C, you may adjust the following parameters ; Time length of peak temperature (longer), Time length of soldering (longer), Thickness of solder paste (thicker).

2. Reference Condition of Hand Soldering

- 1) Temperature : 400°C Max.
- 2) Duration : Less than 3s
- 3) Number of Times : One Time

※ We concluded that there is no specific problem in characteristics and reliability under the temperature profile above. However, since the most appropriate temperature profile condition differs depending on the solder paste, we highly recommend you examine whether there is problem in your own condition.

3. Condition of Heat-Resistant



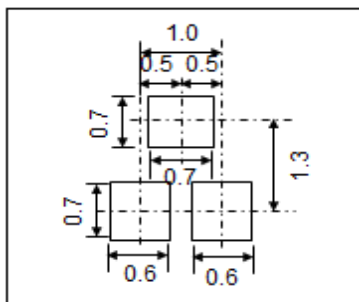
① Pre-Heating Rate	5°C/s Max.
② Pre-Heating	180°C Max., 120s Max.
③ Heating Rate	1~5°C/s
④ Soldering	Over 230°C, 40s Max.
⑤ Peak Temperature	265°C Max., 10s Max.
⑥ Cooling	60s Min.
⑦ Number of Times	2 Times Max.

4. Condition of Washing

Washing Bath		Time	Temperature	Remarks
First Bath	Ultrasonic Bath	~60sec	Room Temperature	25~28kHz, 15W/L
Second Bath	Immersion Bath	~60sec	Room Temperature	-
Third Bath	Vaper Bath ※	~60sec	~44.7°C	Boiling points differ to washing liquid.

※ In vaper bath,you can not use ethanol, methanol, and water due to their high boiling points.

5. Reference Copper Plate Area Dimension on Printed Circuit Board



Unit : mm

※ Copper plate area dimensions are reference dimensions with being soldered with conditions bellow.
 PCB.....FR-4, t=1.6mm
 Solder paste.....M705-GRN360-K2V
 Paste thickness.....150um
 Reflow soldering.....250°C, 10s Max.

Optimize footprint dimensions to the board design and soldering conditions.

Notes

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- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.
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