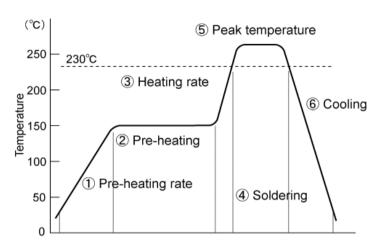


Condition of Soldering

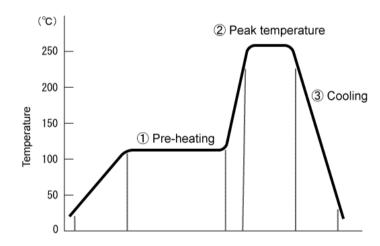
Product	Transistor / MOSFET	Package TO-263 (D2PAK, LPTS)

Recommendable 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 More than 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).

■ Recommendable Condition of Flow Soldering

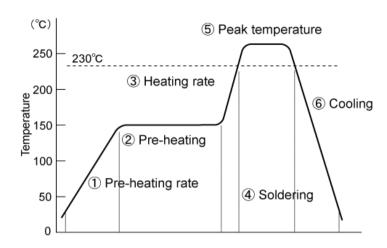


- ① Pre-Heating 100~120°C, 120~300s
- 2 Peak Temperature 245~265°C 10s Max.
- 3 Cooling 60s Min.
- 4 Number of Times 1 Times Max.

■ Recommendable Condition of Hand Soldering

Temperature : 350°C Max.
Duration : Less than 3s
Number of Times : One Time

■ Condition of Heat-Resistant



① Pre-Heating Rate 1~5°C/s

2 Pre-Heating 150~180°C, 60~120s

③ Heating Rate 1∼5°C/s

4 Soldering More than 230°C,

20~40s

⑤ Peak Temperature 265°C Max., 10s Max.

6 Cooling 60s Min.

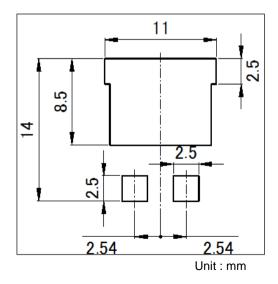
7 Number of Times 2 Times Max.

■ 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.

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

■ Reference Copper Plate Area Dimension on Printed Circuit Board



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. Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Poducts beyond the rating specified by ROHM
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