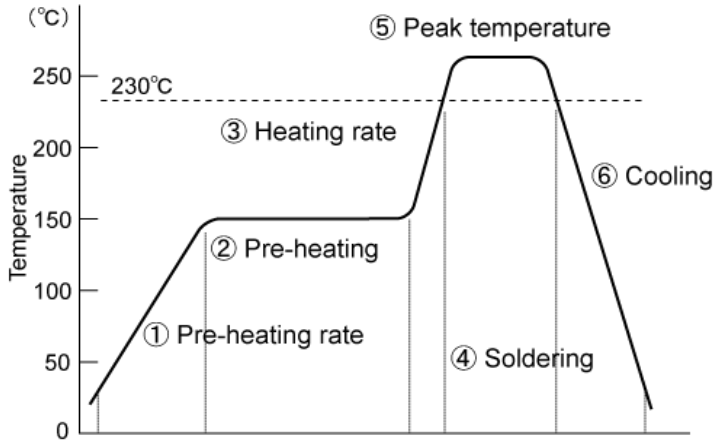


Product	Transistor / MOSFET	Package	DFN2020-3S (HUML2020L3)
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## ■ Recommendable Condition of Reflow Soldering



- 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).

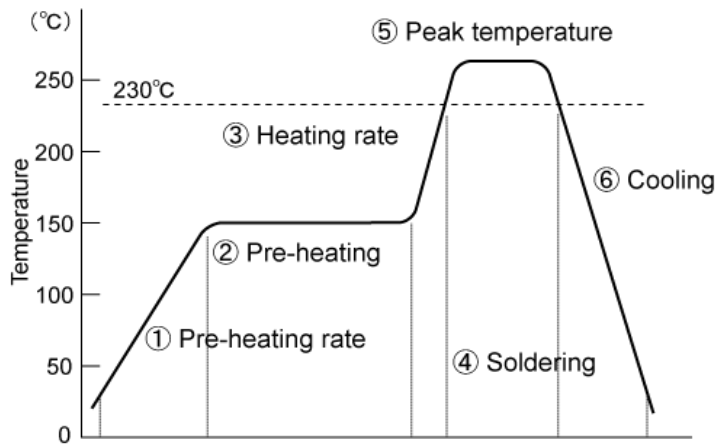
## ■ Recommendable Condition of Flow Soldering

This package, which are the leadless lower electrode type, are not suitable to use flow soldering.

## ■ Recommendable Condition of Hand Soldering

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

## ■ Condition of Heat-Resistant



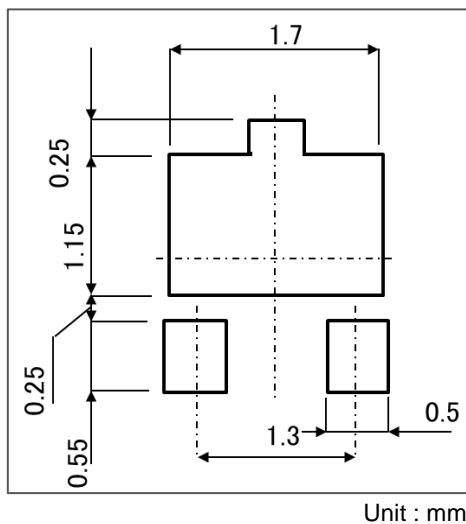
- ① Pre-Heating Rate 1~5°C/s
- ② Pre-Heating 150~180°C, 60~120s
- ③ Heating Rate 1~5°C/s
- ④ Soldering More than 230°C, 20~40s
- ⑤ Peak Temperature 265°C Max., 10s Max.
- ⑥ Cooling 60s Min.
- ⑦ Number of Times 2 Times Max.

## ■ 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.

※ 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



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