

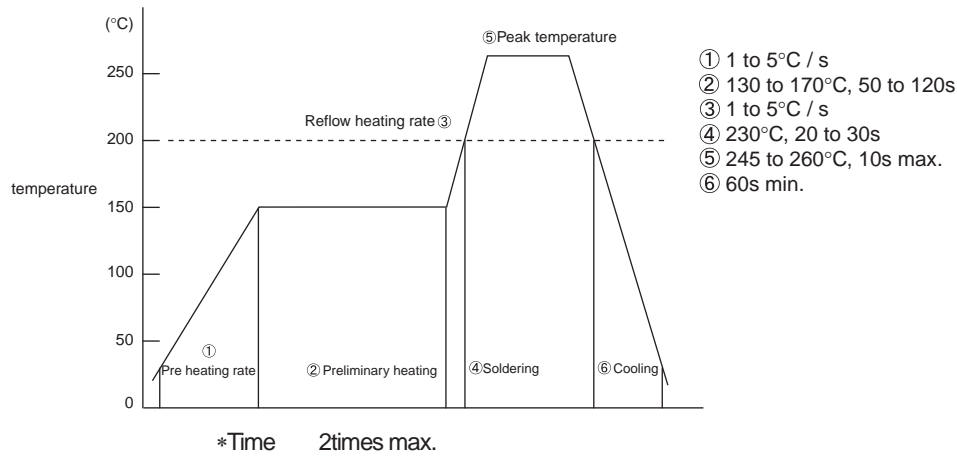
Condition of soldering for
Surface mounted glass Diodes
Lead free paste
(Sn-3Ag-0.5Cu) version

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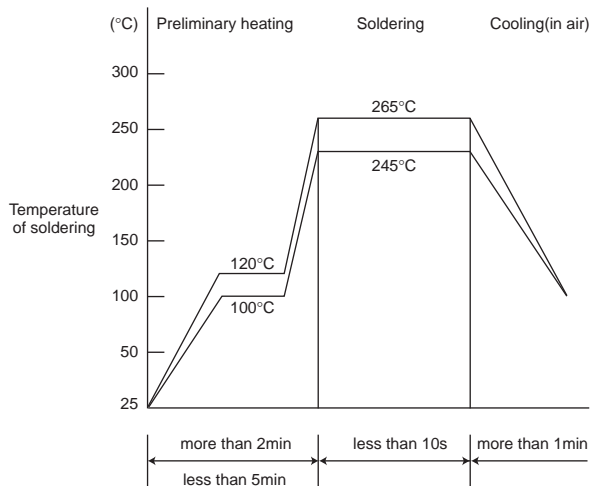
Surface mounted glass Diodes

● Recommended condition of reflow soldering



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).

● Recommended condition of flow soldering



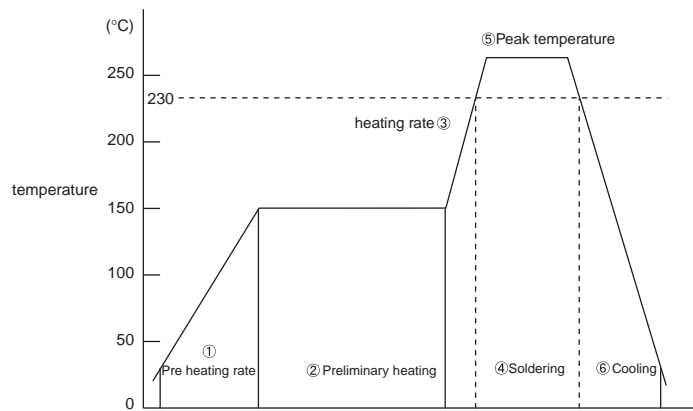
● Condition of hand soldering

Temperature	refer to right table
Time	less than 3s
Times	one time

Temperature differ from PKG
PKG less than 400°C
SMD3, SMD4, SMD5, SMD6, SSD3,
UMD2(expect for 1SS355, 1SS380, 1SS376, UDZ S series)
UMD3, UMD4, UMD5, UMD6,
EMD2, EMD3, EMD4, EMD5, EMD6,
VMN2, VMD2, VMD3,
TUMD2, TSMD5, TSMD6,
MPD, CPD, LLDS, LLDL, GMD2, TUMD5
PKG less than 350°C
UMD2(1SS355, 1SS380, 1SS376, UDZ S series)
PMDU, PMDS, PMDT

Surface mounted glass Diodes

● Condition of heat-resistant



- ① 1 to 5°C / s
- ② 150 to 180°C, 60 to 120s
- ③ 1 to 5°C / s
- ④ 230°C, 20 to 40s
- ⑤ 260°C max, 10s max.
- ⑥ 60s min.

* Time 2Times max.

Surface mounted glass Diodes

● Recommended condition of washing

1. Washing liquid

washing liquid	manufacturers	glass type
water	–	○
ethanol	–	○
methanol	–	○
pine alpha ST-100S	ARAKAWA CHEMICAL	×
clean through 750H	KAO	×
technocare FRW-1	TOSHIBA TECHNOCARE	○
mighty solve AH-V	ASAHI GLASS	○

○ : Possible to use × : No problem on characteristics, but marking may fade or disappear.

2. Condition of washing

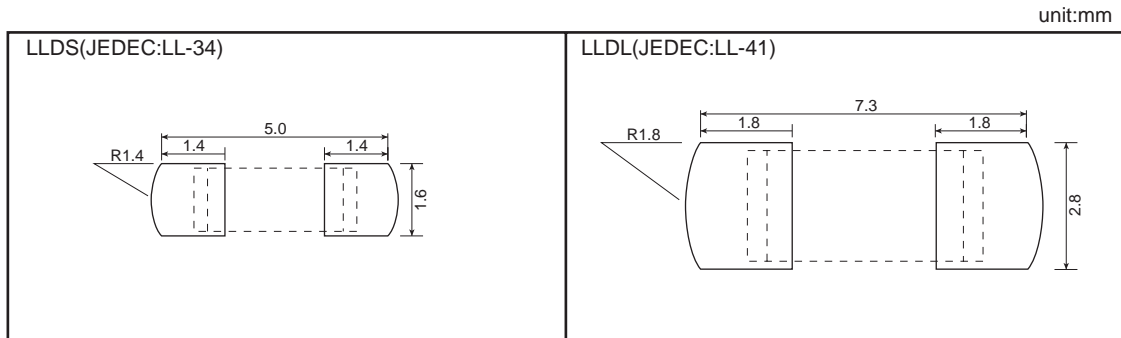
washing bath		time	temperature	remarks
first bath	ultrasonic bath	less than 60s	room temperature	25 to 28kHz, 15W / L
second bath	immersion bath	less than 60s	room temperature	
third bath	vaper bath *	less than 60s	less than 44.7°C	boiling points differ to washing liquid

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

Soldering conditions

Surface mounted glass Diodes

- Reference to copper plate area dimension on printed circuit board



*Copper plate area dimensions above are reference dimensions with being soldered with conditions bellow.

PCB	FR-4,t=1.6mm
Solder paste	M705-GRN360-K2V
Paste thickness	150mm
Reflow soldering	max. 250°C, 10s

Solderability will depend on the soldering conditions, solder paste, paste thickness, soldering pad size, mount layout and so on.
So, it is difficult for ROHM to refer to customer's soldering conditions.

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