— Information for board assmbly —

Package : HSSOP-A54

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1. Construction & Materials

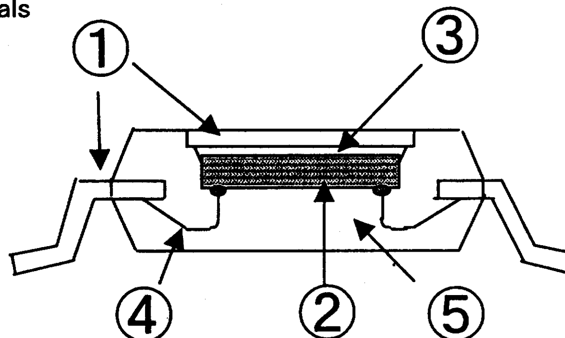


Fig. 1 Construction

No.	Name	Materials
①	Lead Frame	Cu-Alloy (External lead : Solder plating)
②	Die	Silicone
③	Die Attach	Ag Paste
④	Wire	Au Wire
⑤	Molding	Epoxy Resin

The dryness weight : 1. 2 g

2. Packing specifications

2. 1. Packing forms、Packing quantities、Packing directions

Packing forms	Embossed tape
Packing quantities	1000pcs/reel
Packing directions	E2 (When you keep a reel in your left hand and draw out a tape by your right hand, first PIN is upper left)

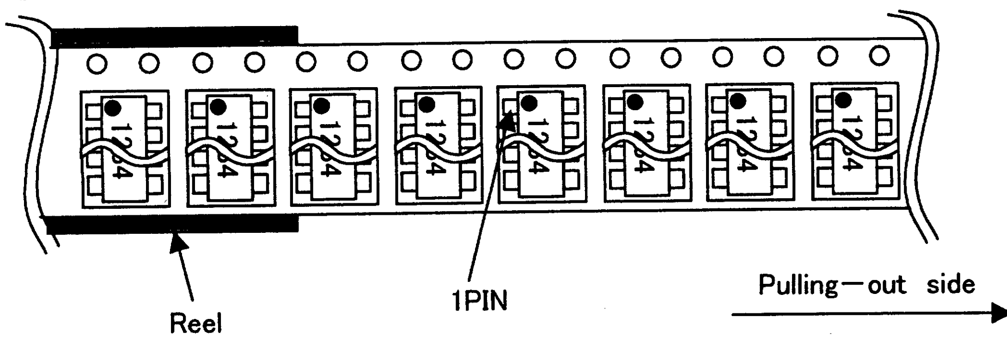


Fig. 2 Packing directions

2. 2. Embossed tape and Reel dimension

2. 2. 1. Embossed tape dimension

Fig. 3 Embossed tape

(Unit : mm)

A1	B1	D0	D1	E	F	K'	P1	P2	T	W	P0
13. 8 ±0. 1	22. 4 ±0. 1	Φ1. 55 ±0. 05	Φ2. 05 ±0. 05	1. 75 ±0. 1	14. 2 ±0. 1	2. 35 ±0. 1	16. 0 ±0. 1	2. 0 ±0. 1	0. 3 ±0. 05	32. 0 ±0. 3	4. 0 ±0. 1

2. 2. 1. Reel Dimensions

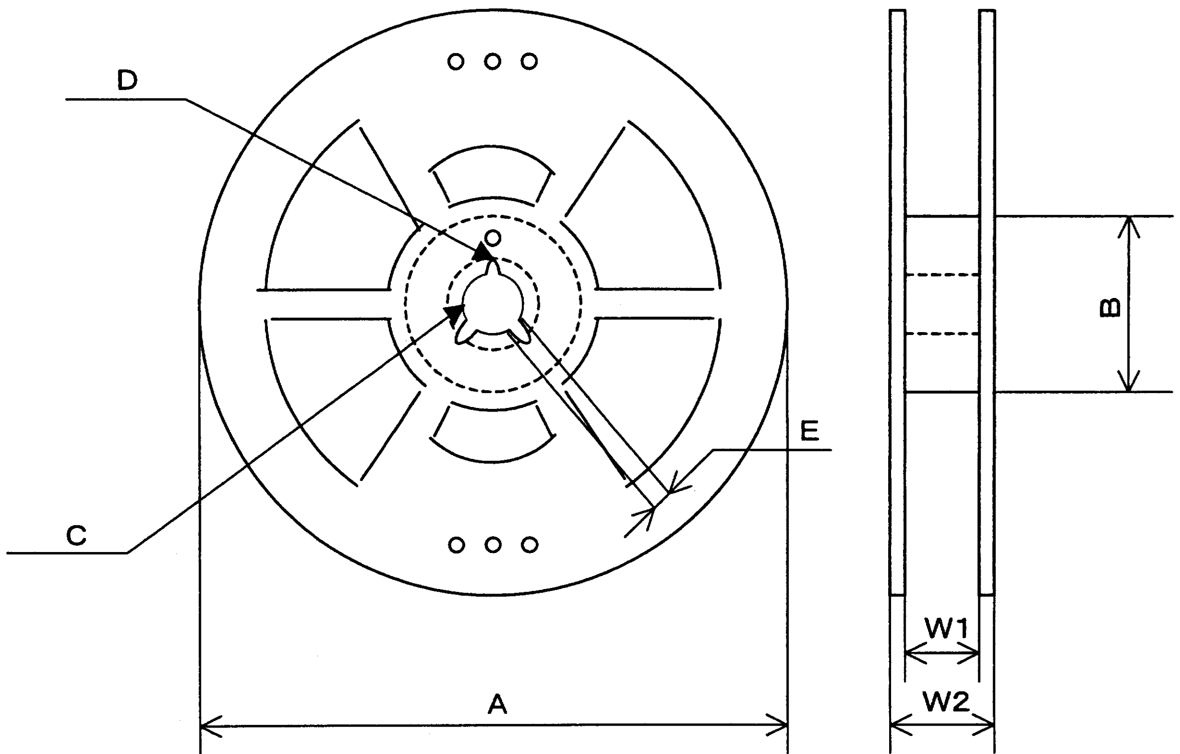


Fig.4 Reel Dimensions

(Unit:mm)

A	B	C	D	E	W1	W2
Φ330	Φ100	13.0 ±0.2	Φ21 ±0.8	2.0 ±0.5	33.5 ±1.0	37.5 ±1.0

2. 3. Leader tape and Trail tape specifications

2. 3. 1. Leader tape specifications

Leader tape has no devices area which has no puroducts over 40 pockets.

2. 3. 2. Trail tape specifications

Trail tape has no devices area which has no products over 10 pockets.
Trail tape isn't fixed directly to reel.

2. 4. Label marking

Sticking a label which records Fig.5 to a reel and sealed bag and unit box.

Type No.
BA5996FS−E2 ( )
Quantity
1, 000pcs. 0124 A5110F
Lot number
K.YAMADA
Out going inspection stamp
Marking lot number
MNo. 124 023 pcs. ( )
MNo. 124 024 pcs.
JAPAN Excellence in Electronics ROHM

Fig.5 Label marking

2. 5. Packing methods

Label

Reel

Unit box

Tape

Label

Fig. 6 Packing methods

2. 6. Packing forms

The packing box is the dimensions of Fig. 7 .
The packing box can accommodate MAX 5 unit boxes.

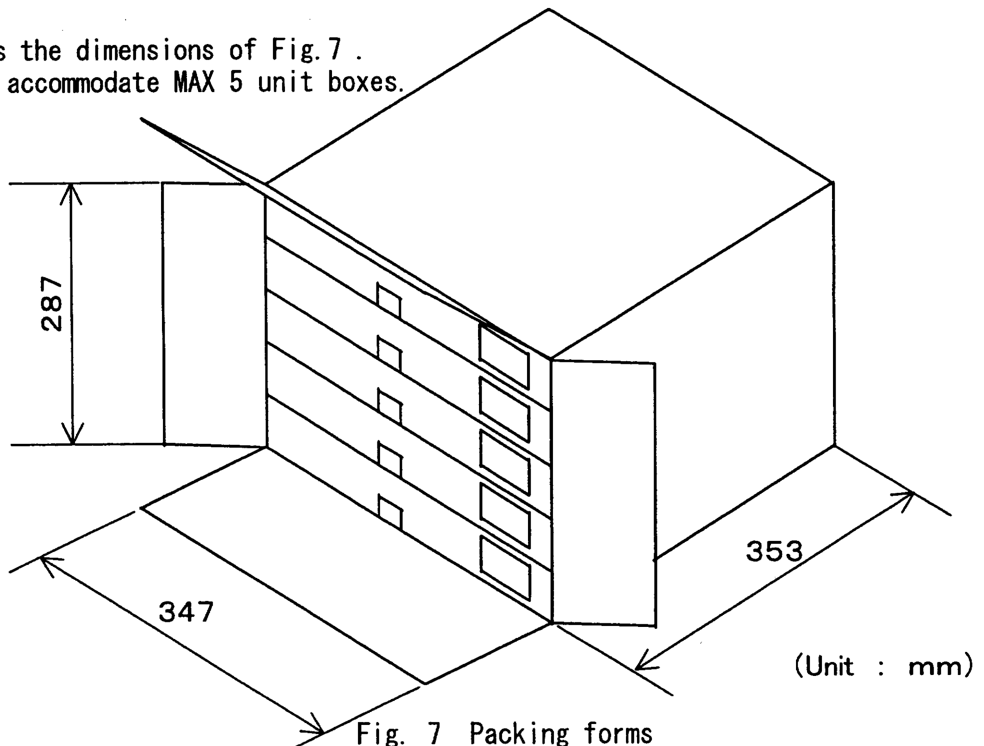


Fig. 7 Packing forms

2. 6. Packing materials

Material name	Materials
Embossed tape	PS
Cover tape	APET ＋ PE
Reel	PS
Unit box	Corrugated paper
Packing box	Corrugated paper

2. 7. Others

2. 7. 1. Peeling force of cover tape

The peeling force of the cover tape is spesified as 0.2N～0.7N .

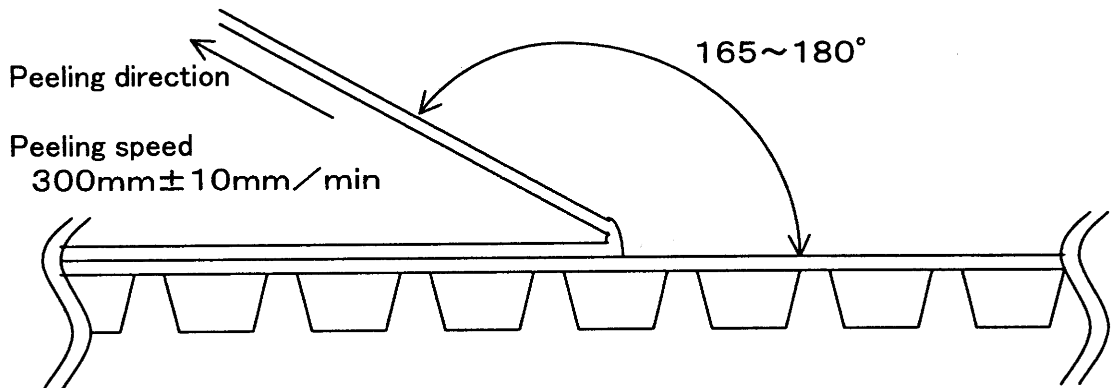


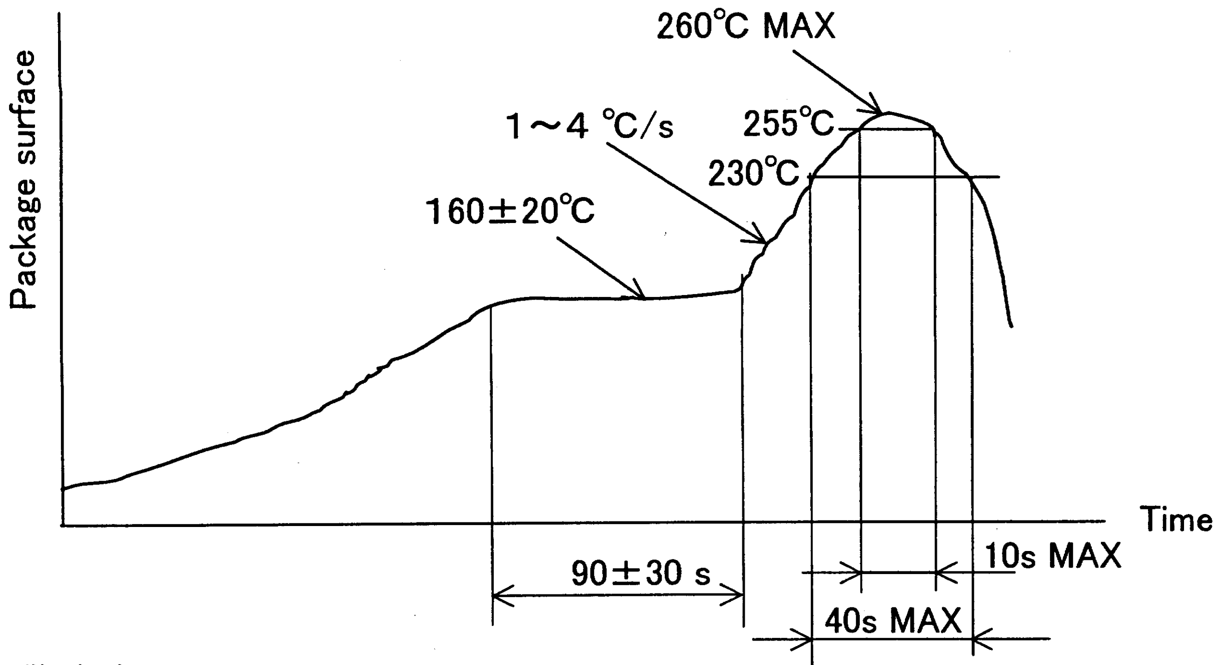
Fig.8 Peeling methods

2. 7. 2. Missing of taping devices

(1) Countinuous missing is zero.
(1) Uncontinuous missing is MAX 0.1%/reel.

3. Soldering conditions

3．1 Reflow condition with the Sn-Ag high-melting-point solder



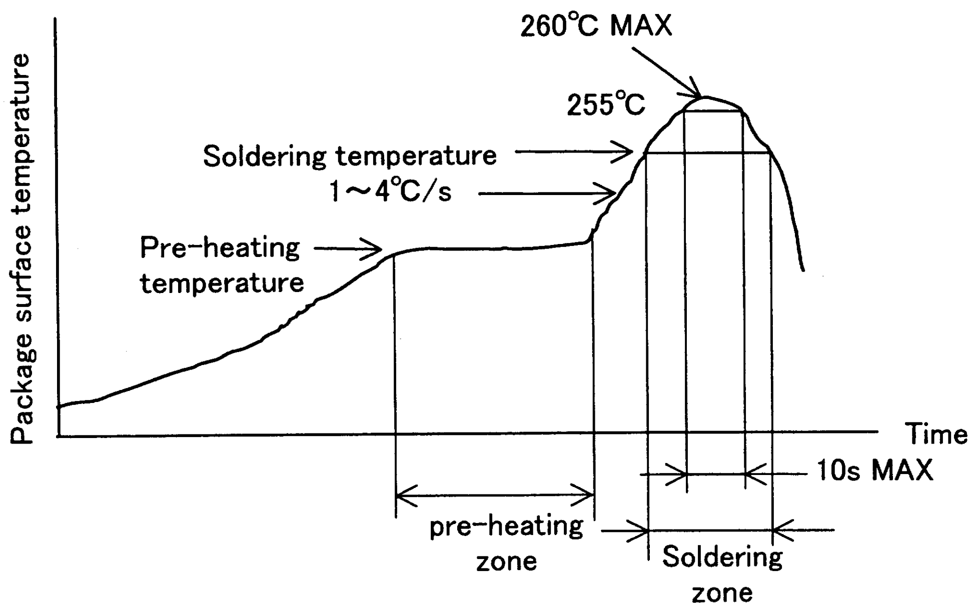
(Notice)

(1) Additional heat is until 2-times.

3．1．1 Allowance reflow condition with the Sn-Ag high-melting-point solder.

The above-mentioned profile is standard , and it can mount in the following profile with the preheating zone and the soldering zone.

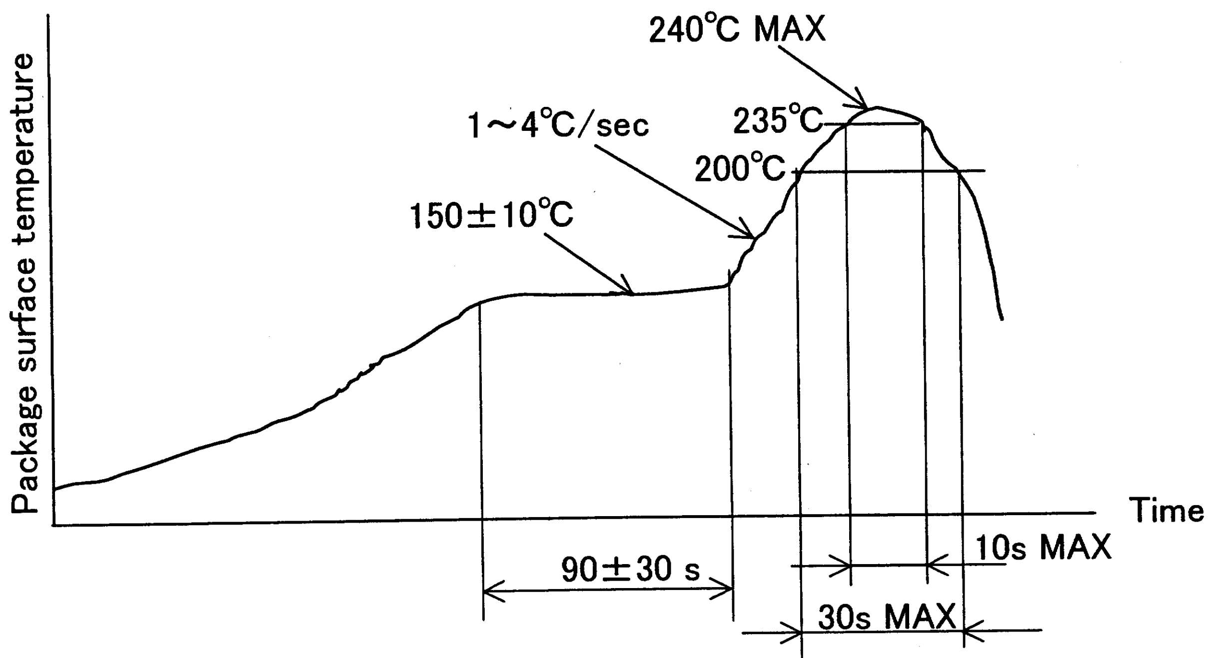
Pre-heating temperature ; 130℃～190℃
Pre-heating zone ; 120s MAX
Soldering temperature ; 220℃～230℃
Soldering zone ; 60s MAX



(Notice)

(1) Additional heat is until 2-times.

3. 2 Reflow conditions with Sn-Pb solder



(Notice)

(1) Additional heat is until 2-times.

(2) The Sn-Pb solder recommends the above-mentioned profile, and it can set up to the profile of Sn-Ag solder.
If the mounting condition in your company does not exceed standard of our company, it can mount on your company mounting conditions.

3．3 Flow-soldering

The heat-resistat guarantee conditions in which flow-soldering method mouting is possible on shouw below.

Processing	Conditions	
	Temperature	Time
Pre-heating	120℃～150℃	60sec MAX
Solder bath	260℃±3℃	Within 10 ± 2sec

Notes) In the case of double-wave-soldering method mounting, the time of the solder bath is specified in the total time.

3．3．1 Notes in the flow-soldering method mounting

(1) Please do not use other soldering methods when this flow-soldering method is used.

(2) Please wash off flux residue completely after flow-soldering due to the influence on the reliability of the other parts or board wiring.

(3) Solder bridges may be generated between leads.

3．4 Partical heat supply method (by soldering iron)

Conditions when partical heat supply method (by soldering iron) is used ;

Temperature : 380℃MAX   Time : 4sec/pin MAX

In this case, please take care so that the soldering iron does not contact the leads.

4. Store products and allowance time to mounting

4．1．Store products

Please store products in the following conditions ;

Temperature : 5 to 30 ℃MAX   Humidity : 40 to 70 % RH

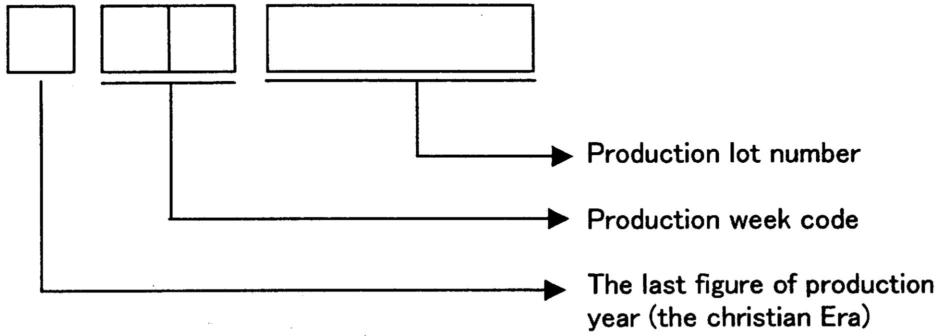
4．2．The preservation period before packing opening

The preservation term of a guarantee before packing opening is one year.

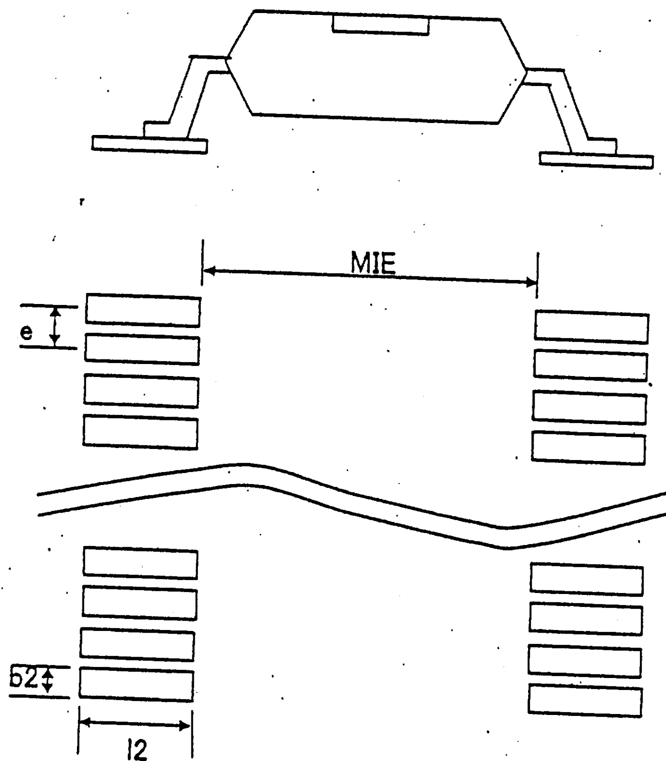
4．3．Allowance time from opening the moisture-proof package to mounting

This package does not require additional drying treatment as long as the moisture condition at the mounting process is within our recommended mounting conditions. Therefore, this device is not packed as moisture proof.

5. Meaning of marking lot number



6. Reference land terminal area



Unit : mm

Land pitch e	Inside land terminal dimension MIE	Land length ≧ l 2	Land width b2
0.80	11.60	1.20	0.50

The actual design of the mounting pads must be suited to the circumstances.

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