

## Package : HSOP25Z

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### 1. Structure and materials

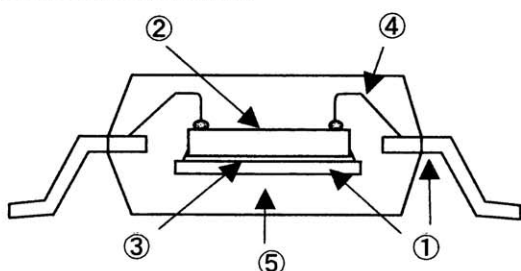


Fig. 1 Structure

No.	Item	Materials
①	Lead Frame	Cu-Alloy (External lead : Pb free solder plating)
②	Die	Silicon
③	Die Attach	Solder
④	Wire	Au
⑤	Molding	Epoxy Resin

### 2. Tape and Reel information

#### 2. 1. Packing specification

Tape	Embossed carrier tape
Quantity	See the table on page 4 / 4
Direction of feed	E2 (See Fig. 2)

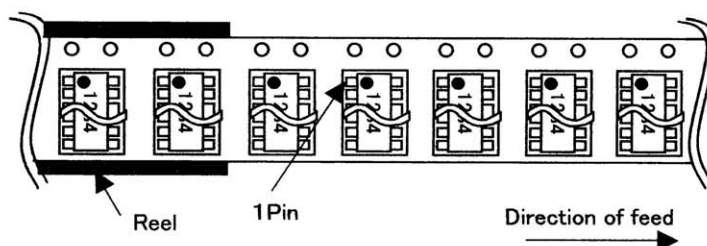


Fig. 2 Typical Tape and Reel configuration

#### 2. 2. Tape and Reel specification

##### 2. 2. 1. Tape and reel dimensions (See the table on page 4 / 4)

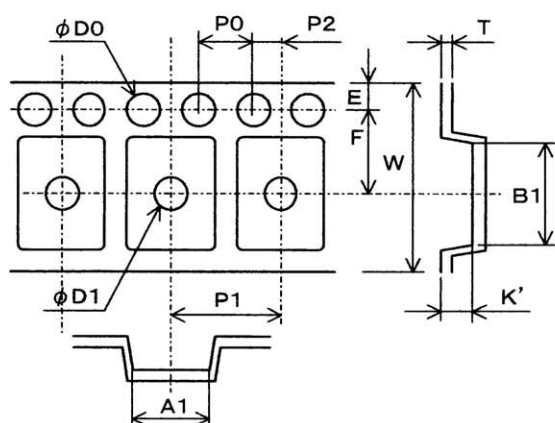


Fig. 3 Tape dimensions

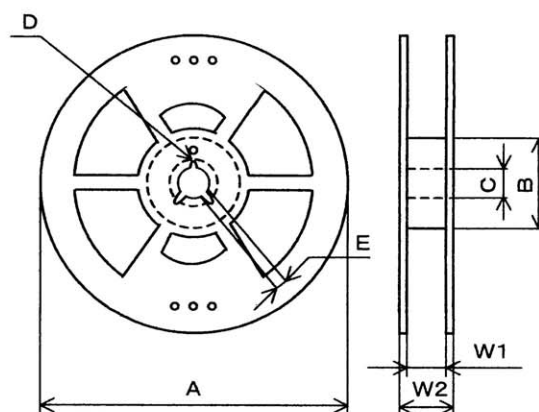


Fig. 4 Reel dimensions

## 2. 3. Leader and Trailer

## 2. 3. 1. Leader

No component pockets are 40 pockets or more.

## 2. 3. 2. Trailer

No component pockets are 10 pockets or more.

Tape is free from reel.

## 2. 4. Label for Reel and Box

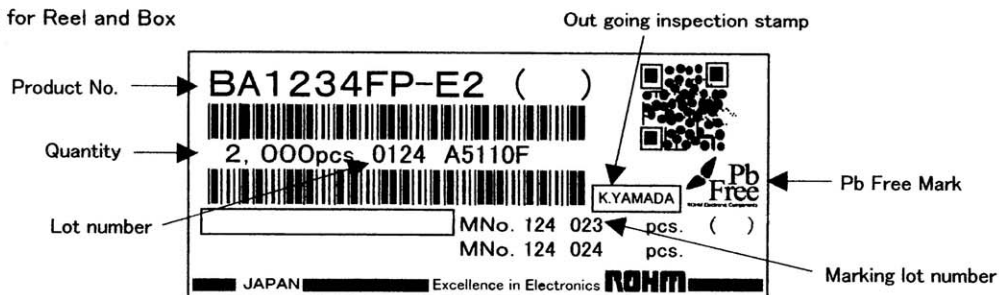


Fig. 5 Label example

## 2. 5. Packing style

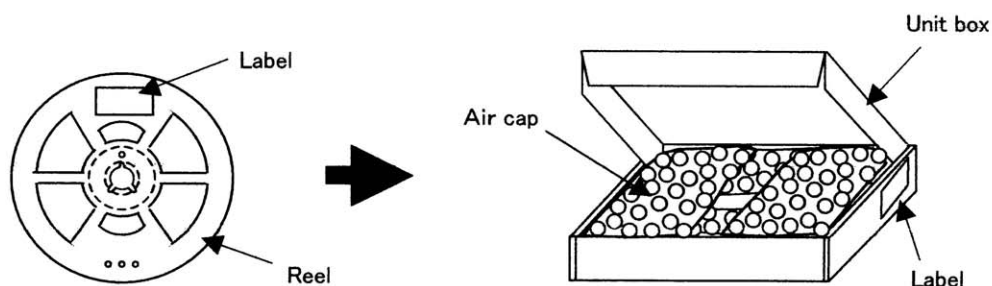
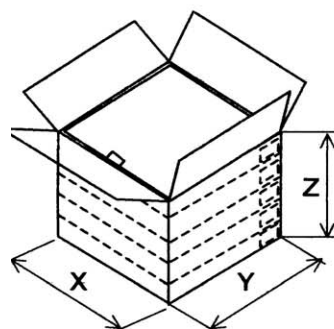


Fig. 6 Packing style

## 2. 6. Shipping style

5 unit boxes or less per shipping box



Package	box dimensions (all dimensions in mm)		
	X	Y	Z
HSOP25	365	372	355

## 2. 7. Packing materials

Item	Material
Embossed carrier tape	PS
Cover tape	PET + PE
Reel	PS
Air cap	Polyethylene
Unit box	Cardboard
Shipping box	Cardboard

\* Please obey the indication of top side in a shipping box

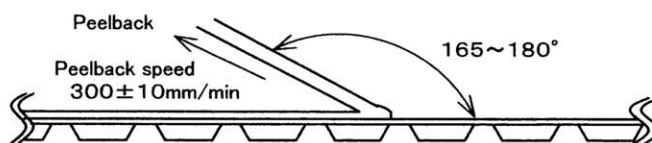
Fig. 7 Shipping box dimensions and Shipping style

## 2. 8. Others

## 2. 8. 1. Peelback strength

Cover tape peelback strength is 0.2~0.7N.

Fig. 8 Test method



## 2. 8. 2. Missing Ics

- (1) No consecutive dropouts.
- (2) A maximum 0.1% of specified number of products in each packing may be missing.

## 3. Storage conditions

### 3. 1. Storage environment

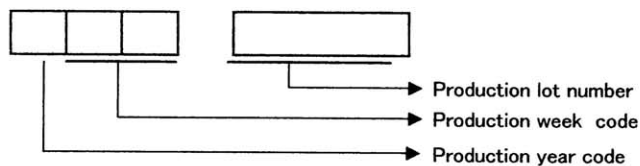
Recommended storage conditions are as follows :

- Temperature : 5~30°C
- Humidity : 40~70% RH

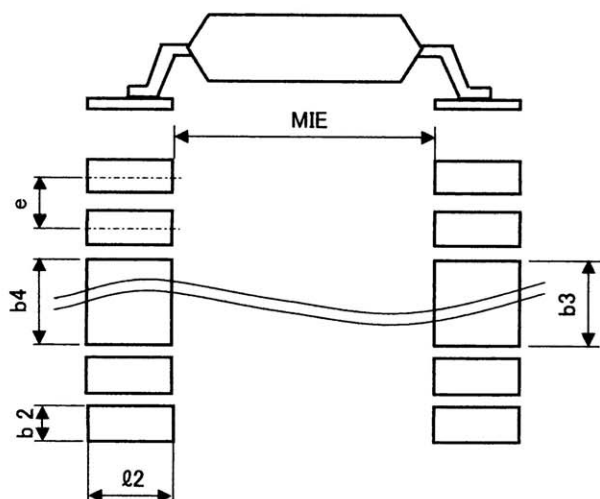
### 3. 2. Storage period

- Specified storage period : 1 year

## 4. Marking lot number



## 5. Footprint dimensions (Optimize footprint dimensions to the board design and soldering condition)

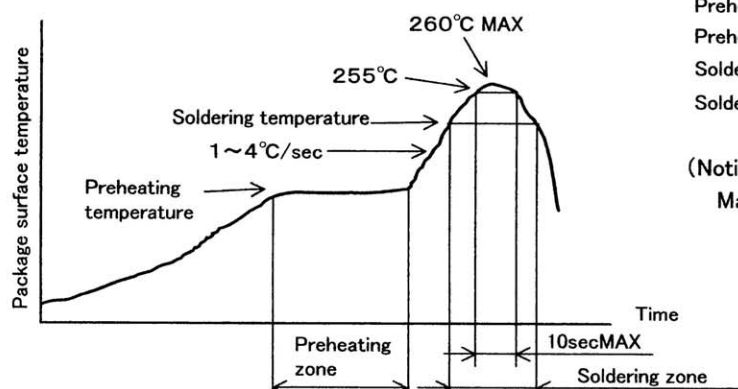


(all dimensions in mm)

Package	Land pitch e	Land space MIE	Land length $\geq l2$	Land width		
				b2	b3	b4
HSOP25Z	0.80	6.00	1.20	0.50	2.90	2.10

## 6. Soldering conditions

### 6. 1. Recommended temperature profile for reflow



- Preheating temperature ; 130°C~190°C
- Preheating zone ; 120sec MAX
- Soldering temperature ; 220°C~230°C
- Soldering zone ; 60sec MAX

(Notice)

Maximum 2-times soldering

## 6. 2 Recommended condition for wave soldering

Process	Conditions	
	Temperature	Time
Preheating	120°C~150°C	60sec MAX
Soldering	260°C±3°C	12secMAX

(Notice) Soldering time is provided for total soldering time in case of dual wave soldering.

## 6. 2. 1 Notes for wave soldering

- (1) Do not use other soldering methods with wave soldering.
- (2) Recommend to clean the board to eliminate flux, solder waste, and other impurities for reliability, after soldering.
- (3) Optimize soldering condition to prevent solder bridging.

## 6. 3 Recommended condition for solder iron

Recommended condition for solder iron

- Solder iron temperature : 380°C or less
- Mounting time : 4sec or less

## 〈 Tape dimensions 〉

Package	Quantity (pcs)	Tape dimensions (all dimensions in mm)											
		A1	B1	D0	D1	E	F	K'	P1	P2	T	W	PO
HSOP25Z	2000	8.4	14.5	φ 1.5	φ 2.0	2.0	11.5	2.3	12.0	2.0	0.3	24.0	4.0
Tolerance		±0.1	±0.1	$\begin{smallmatrix} +0.1 \\ -0 \end{smallmatrix}$	MIN	±0.1	±0.1	±0.1	±0.1	±0.1	—	±0.3	±0.1

## 〈 Reel dimensions 〉

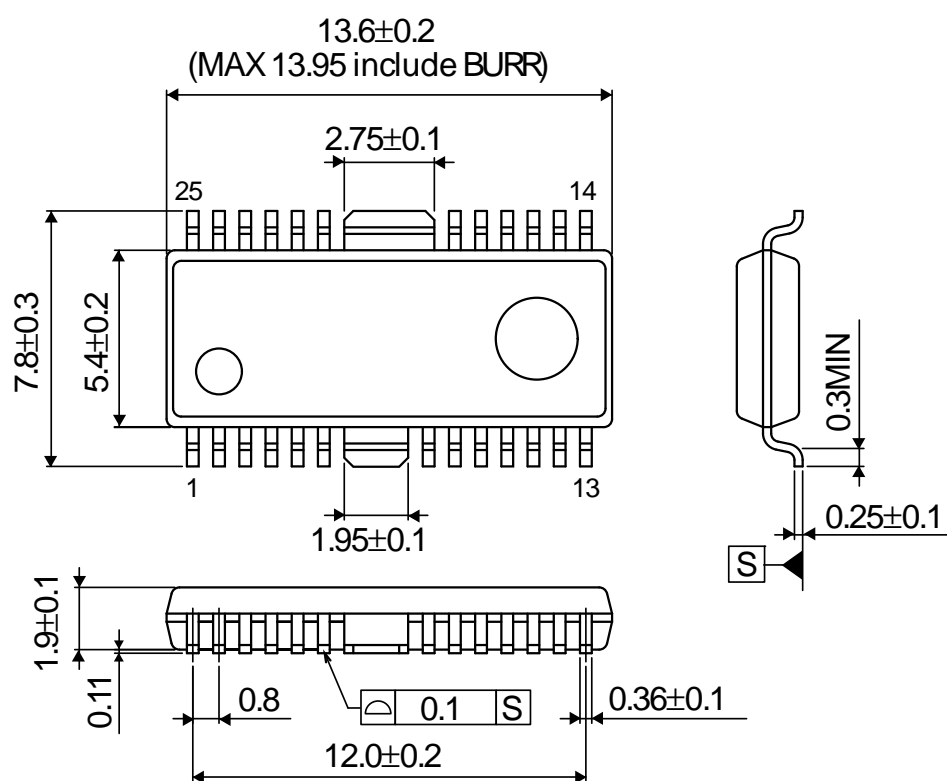
Package	Reel dimensions (all dimensions in mm)						
	A	B	C	D	E	W1	W2
HSOP25Z	φ 330	φ 80	φ 13.0	φ 20.2	1.5	24.5	32.4
Tolerance	—	—	±0.2	MIN	MIN	$\begin{smallmatrix} +2.0 \\ -0 \end{smallmatrix}$	MAX

## 〈 Dehydrated weight 〉

Dehydrated weight dimensions in g
0.40

# Package Dimensions

HSOP25Z



(Unit : mm)



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