

Package : WLGA010V28

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1. Structure and materials

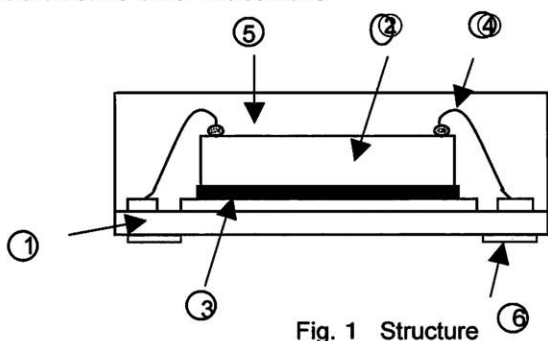


Fig. 1 Structure

No.	Item	Materials
①	Interposer	Glass-epoxy resin
②	Die	Silicon
③	Die Attach	Non-conductive Paste
④	Wire	Au
⑤	Molding	Epoxy Resin
⑥	External Lead	Ni/Au Plate

2. Tape and Reel information

2. 1. Packing specification

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

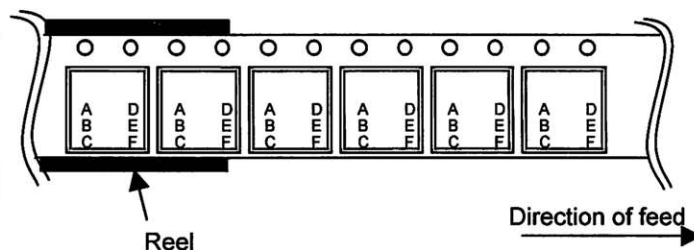


Fig. 2 Typical Tape and Reel configuration

2.2. Tape and Reel specification

2.2.1. Tape and reel dimensions (See the table on page 4/4)

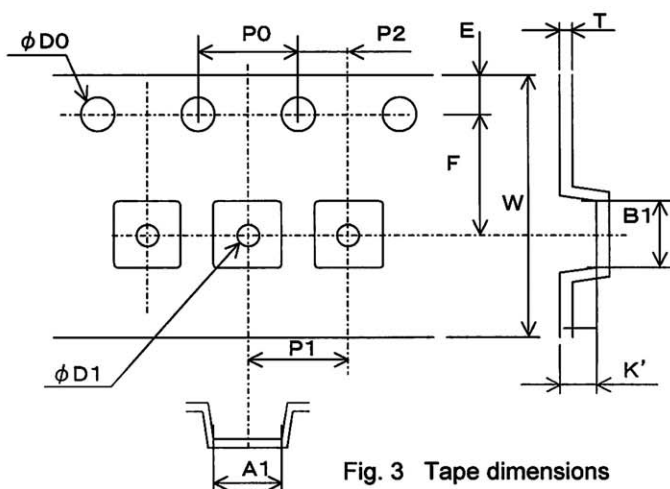


Fig. 3 Tape dimensions

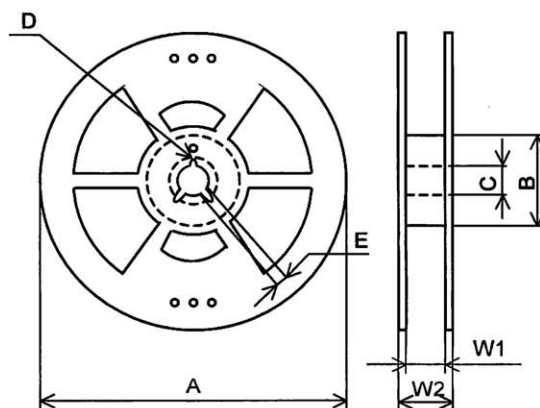


Fig. 4 Reel dimensions

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

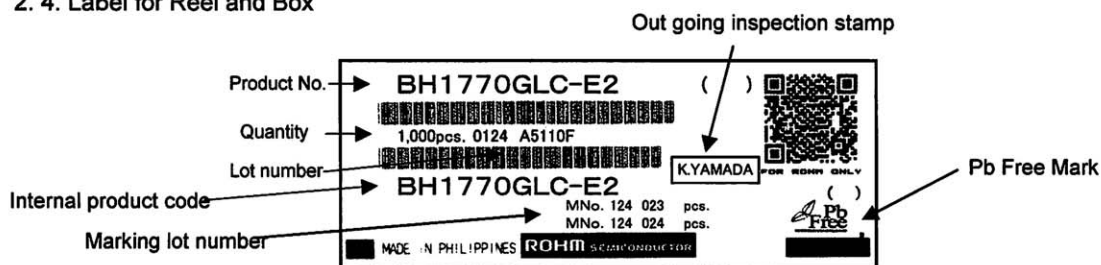


Fig. 5 Label example

2. 5. Packing style

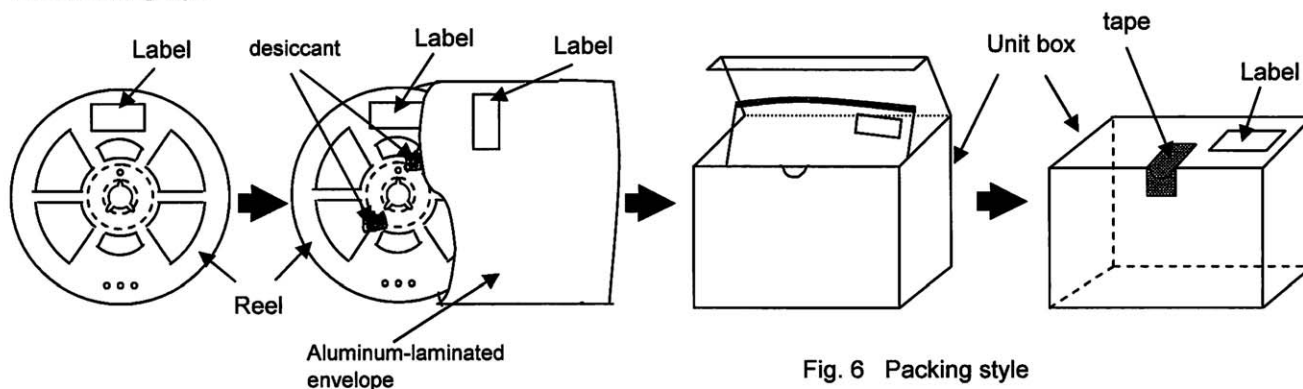


Fig. 6 Packing style

2. 6. Shipping style

4 unit boxes or less per shipping box

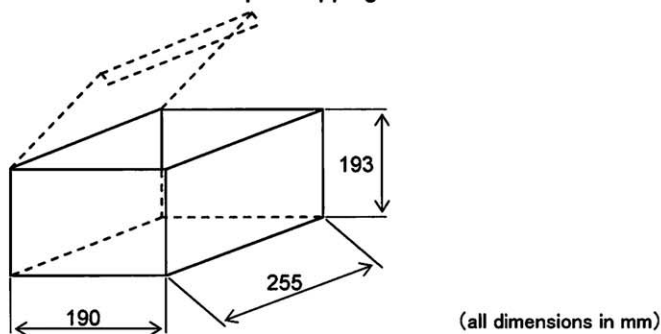


Fig. 7 Shipping box dimensions and Shipping style

2. 7. Packing materials

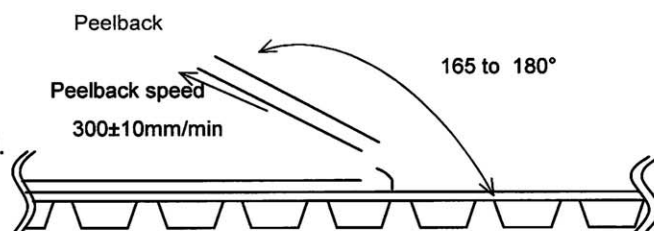
Item	Material
Embossed carrier tape	PS
Cover tape	PET + PE
Reel	PS
Desiccant	Silicagel
Envelope	Aluminume-laminated
Unit box	Cardboard
Shipping box	Cardboard

2. 8. Others

2. 8. 1. Peelback strength

Cover tape peelback strength is 0.2 to 0.7N.

Fig. 8 Test method



2.8.2. Dropouts

- (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

3.3. Specified storage period until soldering

Dry process before mounting is necessary in the following two cases.

1. After the package is opened, the product is left unused over 168 hours.
2. Before the package is opened, the product is left in the package unused over 1 year.

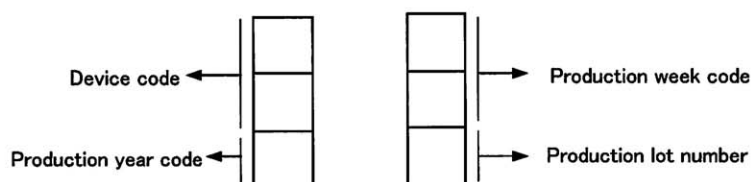
Please execute dry processing in a reel state with 60°C for 48 hours.

At this time, peelback strength of cover tape becomes 0.2N - 0.9N.

Case of transferring to heatproof container such as trays, execute dry processing with 125°C for 24 hours.

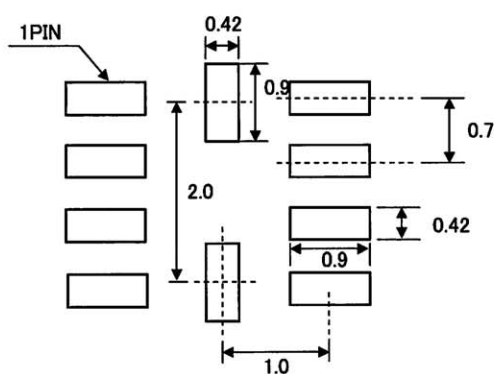
In addition, the dry processing should be max, 2 times due to influence on the product's solderability.

4. Marking lot number



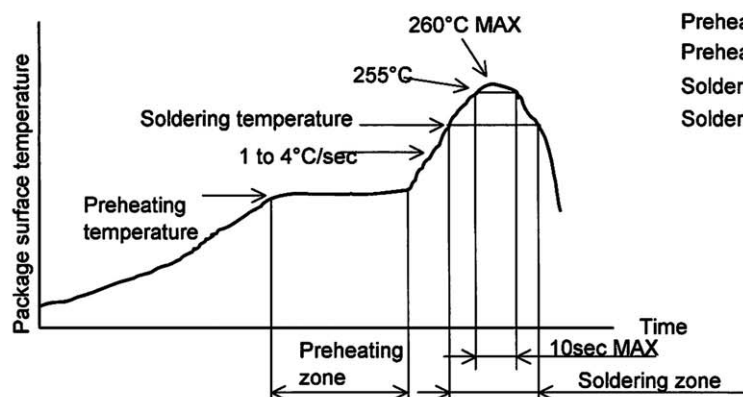
5. Footprint dimensions (Optimize footprint dimensions to the board design and soldering condition)

(all dimensions in mm)



6. Soldering conditions

6.1. Recommended temperature profile for reflow



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

(Notice)
 Maximum 3-times soldering

6.2 The wave soldering method is not supported.

6.3 Underfill

To apply underfill is recommended because it has a possibility of reducing reliability to connect by drop impact or bent stress of board.

< Tape dimensions >

Package	Quantity (pcs)	Tape dimensions (all dimensions in mm)													
		A1	B1	C	C1	D0	D1	E	F	K'	P0	P1	P2	T	W
WLGA010V28	3000	3.05	3.05	-	-	φ1.5	φ1.0	1.75	5.5	1.15	4.0	4.0	2.0	0.25	12.0
Tolerance		±0.1	±0.1	-	-	+0.1/0	±0.1	±0.1	±0.05	±0.1	±0.1	±0.1	±0.05	±0.05	±0.02

< Reel dimensions >

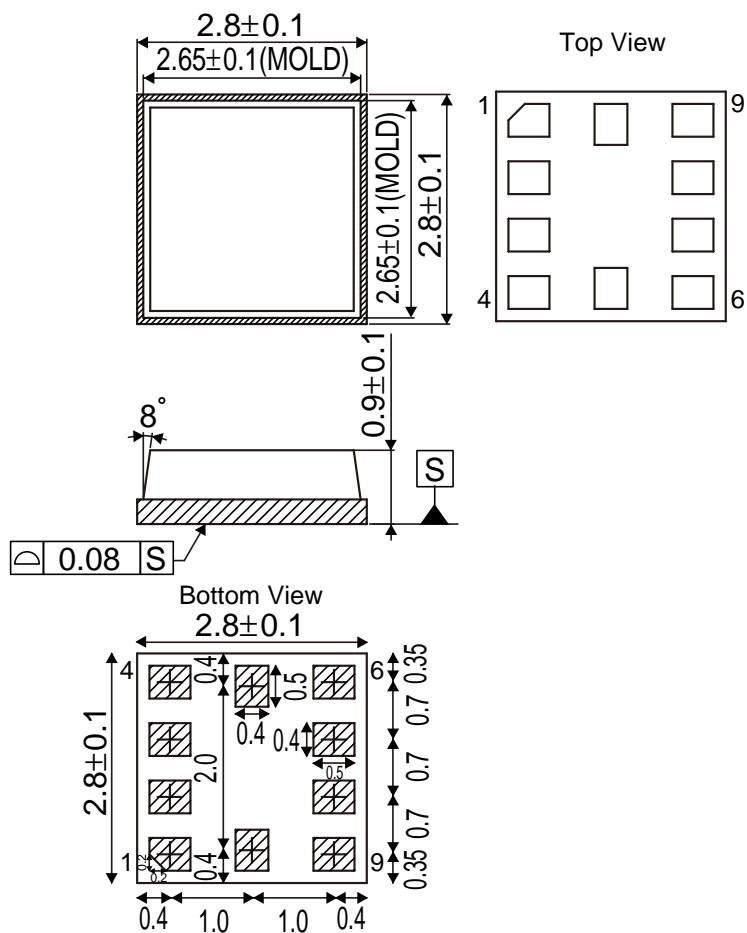
Package	Reel dimensions (all dimensions in mm)						
	A	B	C	D	E	W1	W2
WLGA010V28	φ180	φ60	φ13.0	φ20.2	1.5	13.0	15.4
Tolerance	-	+1.0/0	±0.2	MIN	MIN	+1.0/0	±0.1

< Dehydrated weight >

Dehydrated weight dimensions in g
0.01

Package Dimensions

WLGA010V28



(Unit : mm)

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