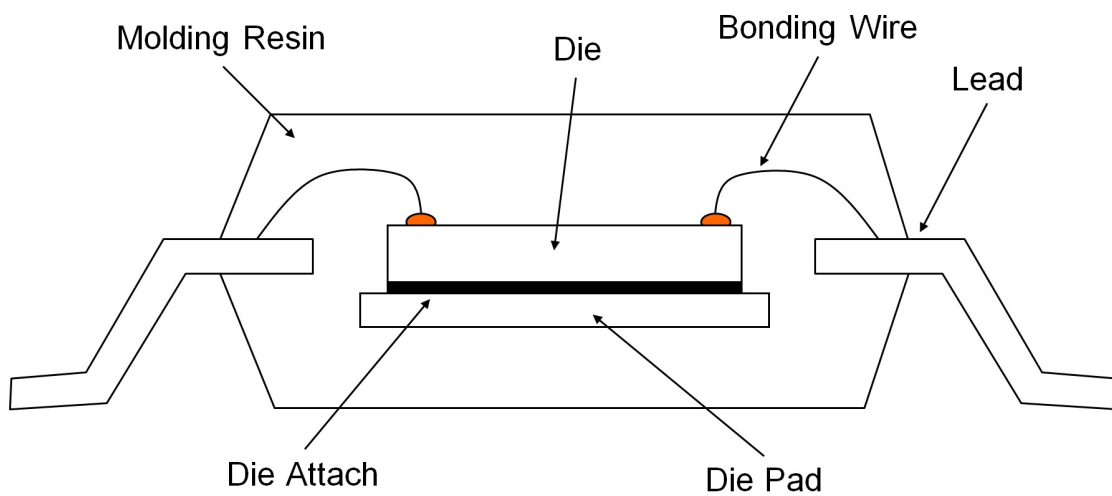


1. Package Information

Package Name	VQFP48C
Type	QFP
Pin Count	48
Outline Dimension	EX259-5001-1
Drawing No.	
Package Weight [g]	0.19
Lead Finish	Pure Tin
MSL Level	Level1

2. Package Structure



3. Packing Specification

3.1 Packing form, Quantity, PIN1 Orientation

Packing Form		Tray
Packing Quantity	[pcs]	100
PIN 1 Orientation		Below Fig.1

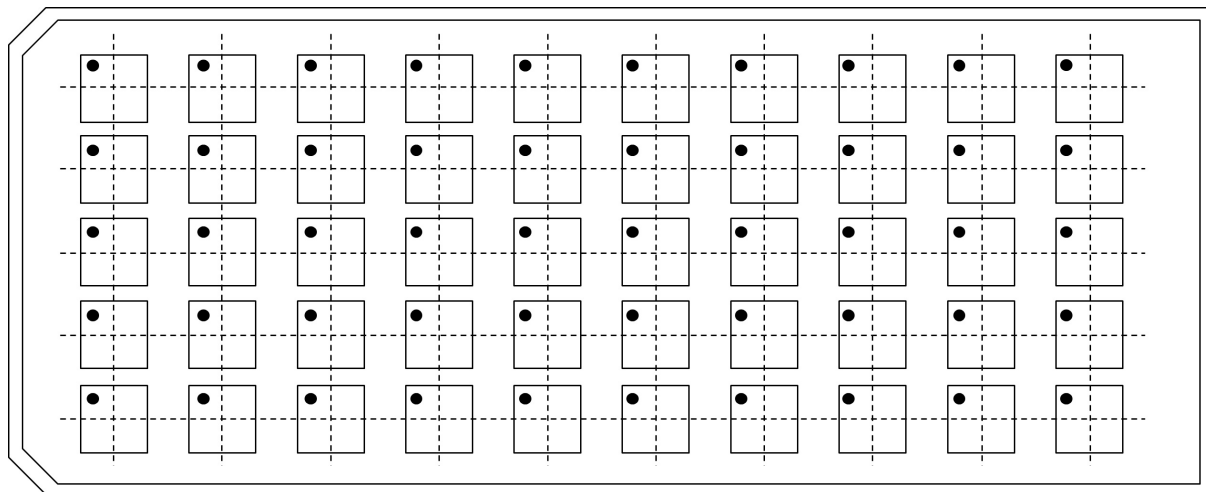
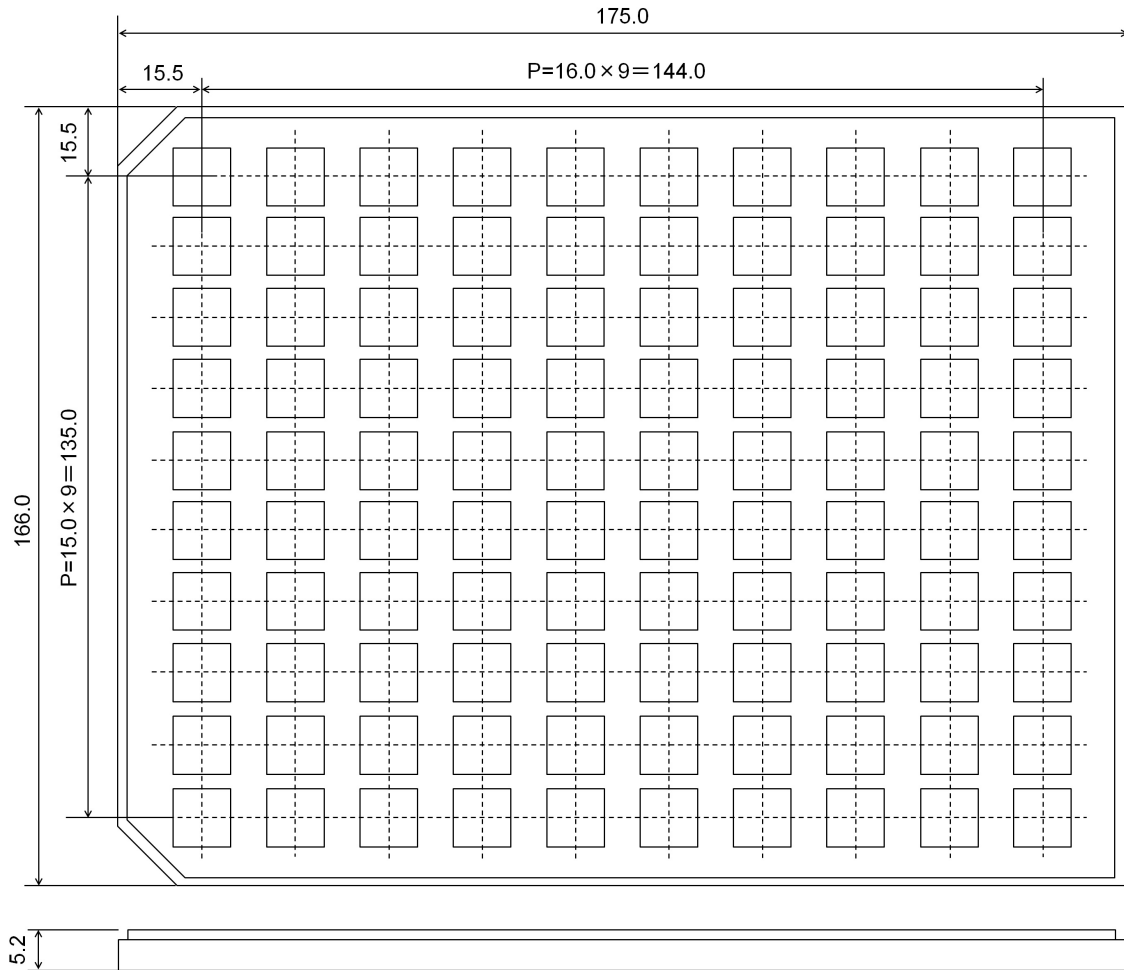


Fig.1 Quadrant Assignments for PIN 1 Orientation in Tray

3.2 Use material

Item	Material
Tray	PPE
Unit box	Cardboard
Shipping box	Cardboard

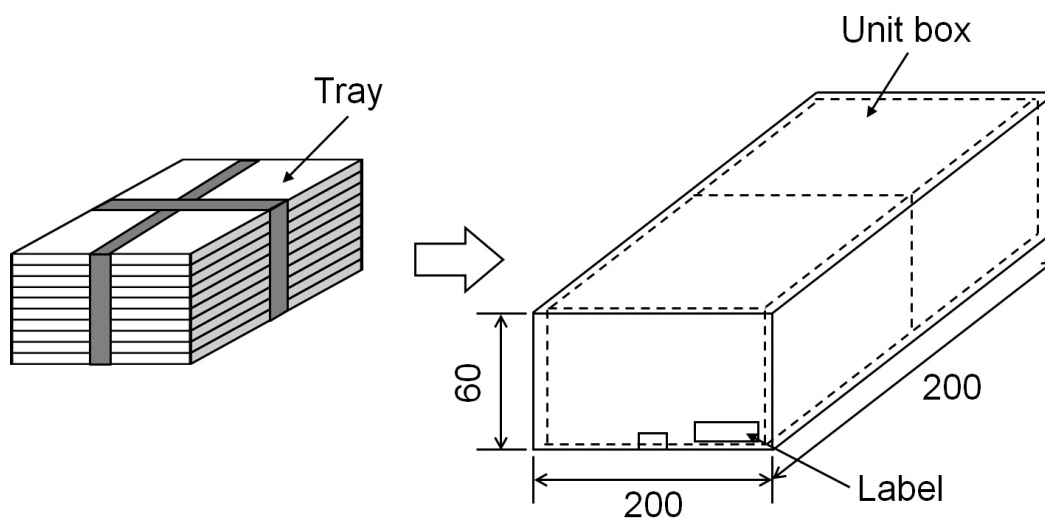
3.3 Tray Specification
3.3.1 Tray Dimension



(unit:mm)

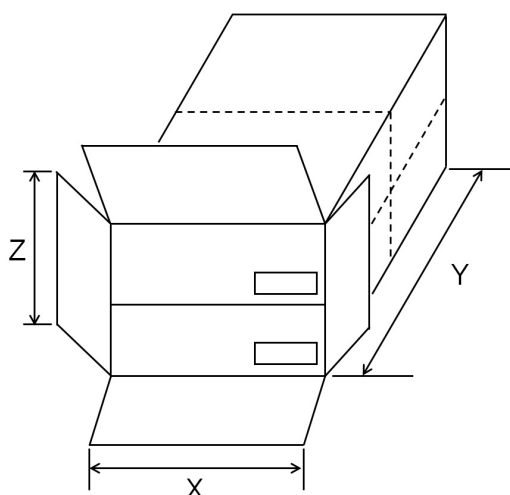
3.4 Packing Method

10 tray(s) or less per unit box



3.5 Packing Style

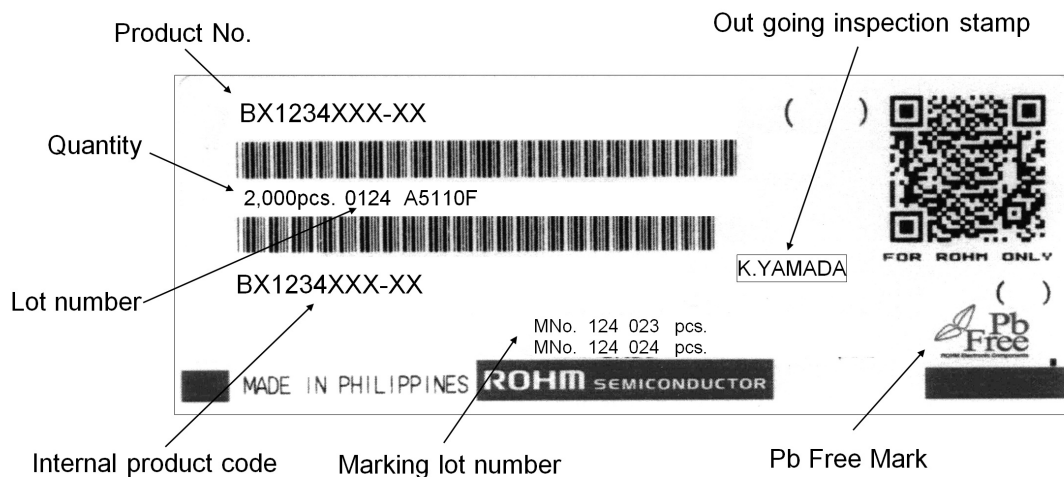
4 unit boxes or less per shipping box



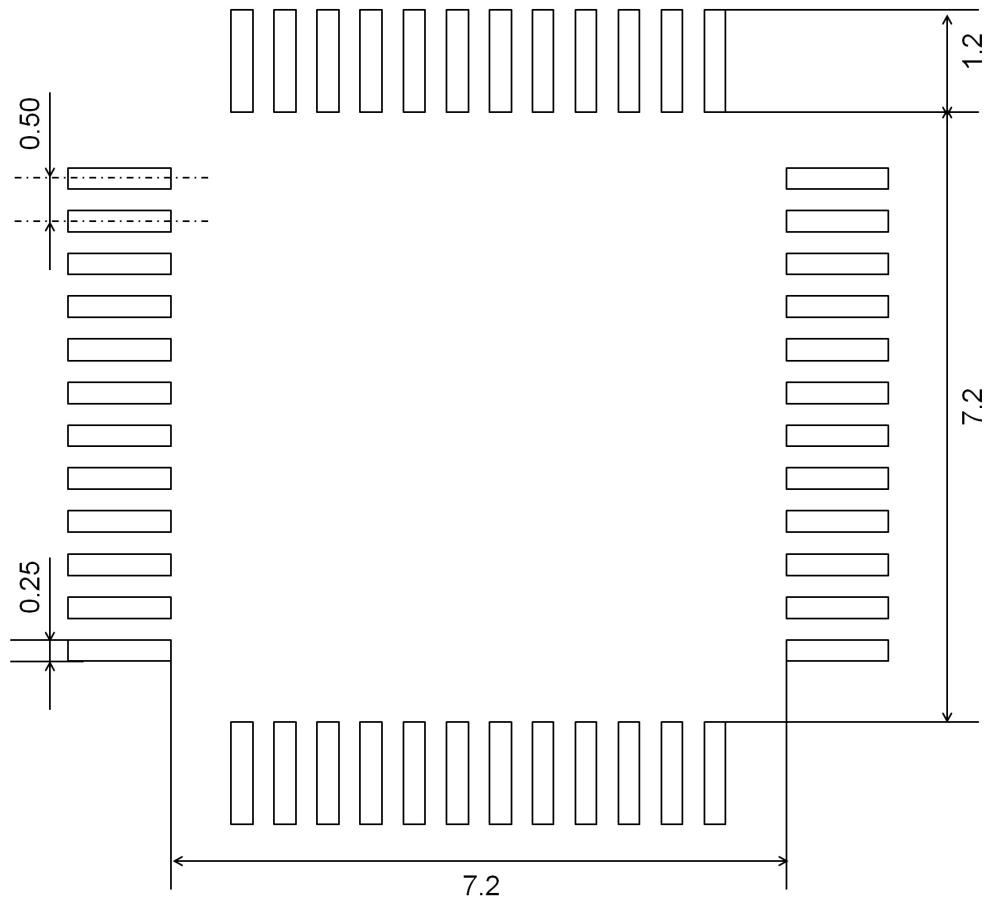
(unit:mm)

Shipping Box Dimension	
X	220
Y	440
Z	140

3.6 Label Specification



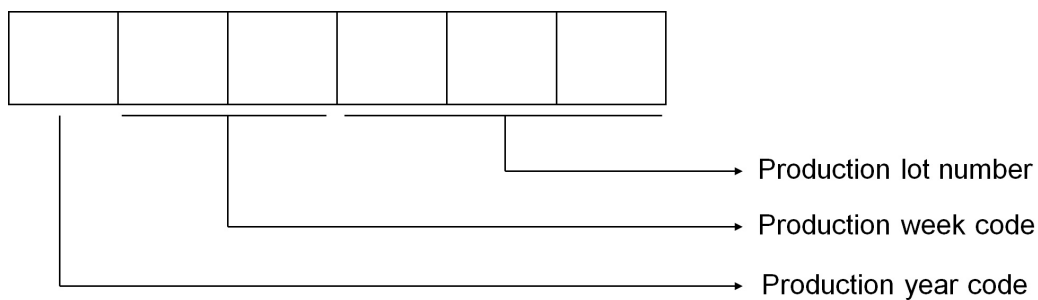
4. Footprint dimensions



(unit:mm)

In actual design, please optimize in accordance with the situation of your board design and soldering condition.

5. Marking Specification



6. Storage conditions

6.1 Storage environment

Recommended storage conditions

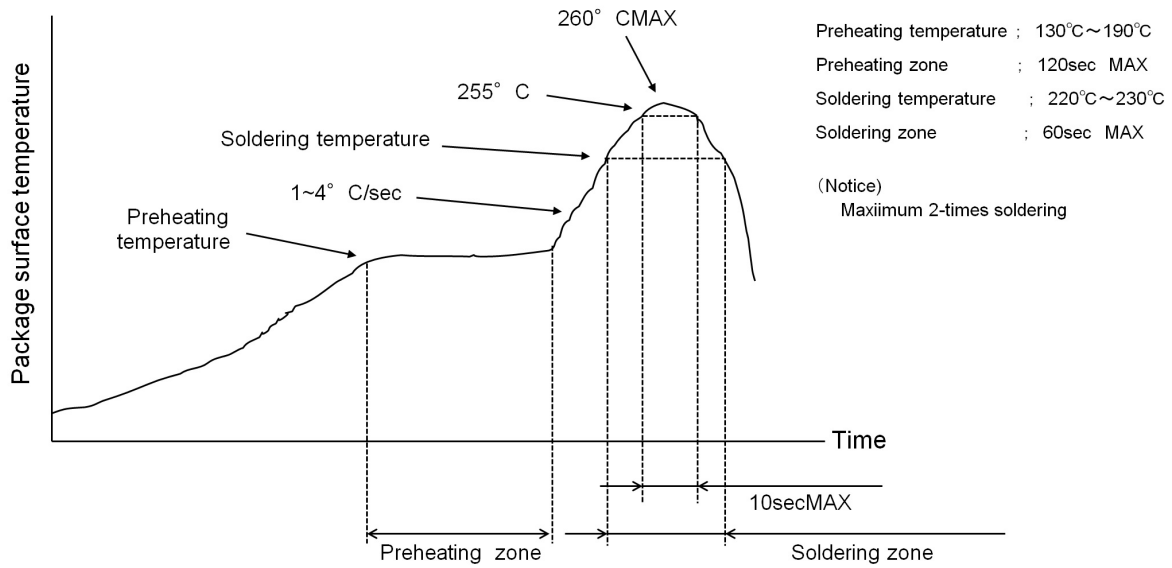
	Min.	Max.	Unit
Temperature	5	30	°C
Humidity	40	70	% RH

6.2 Storage period

	Min.	Max.	Unit
Storage period	-	1	year

7. Soldering conditions

7.1 Recommended temperature profile for reflow



7.2 Recommended condition for wave soldering

Preheating temperature	:	120 °C to 150 °C
Preheating time	:	60 sec MAX
Soldering temperature	:	260 °C ± 3 °C
Soldering time	:	12 sec MAX

Notes for wave soldering

- (1) Soldering time is provided for total soldering time in case of dual wave soldering.
- (2) Do not use other soldering methods with wave soldering.
- (3) Recommend to clean the board to eliminate flux, solder waste, and other impurities for reliability, after soldering.
- (4) Optimize soldering condition to prevent solder bridging.

7.3 Recommended condition for solder iron

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

Notes

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- 2) Before you use our Products, please contact our sales representative and verify the latest specifications :
- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.
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- 5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.
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