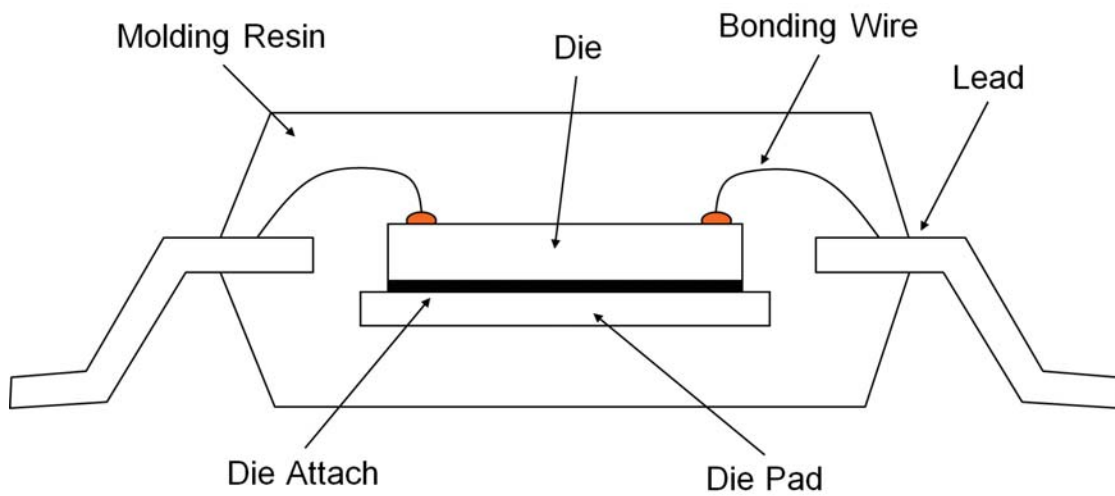


1. Package Information

Package Name	SQFP-T64
Type	QFP
Pin Count	64
Package Weight [g]	0.51
Lead Finish	Pure Tin
MSL	Level3

2. Package Structure



3. Packing Specification

3.1 Packing form, Quantity, PIN1 Orientation

Packing Form		Tray
Packing Quantity	[pcs]	50
PIN 1 Orientation		Below Fig.1

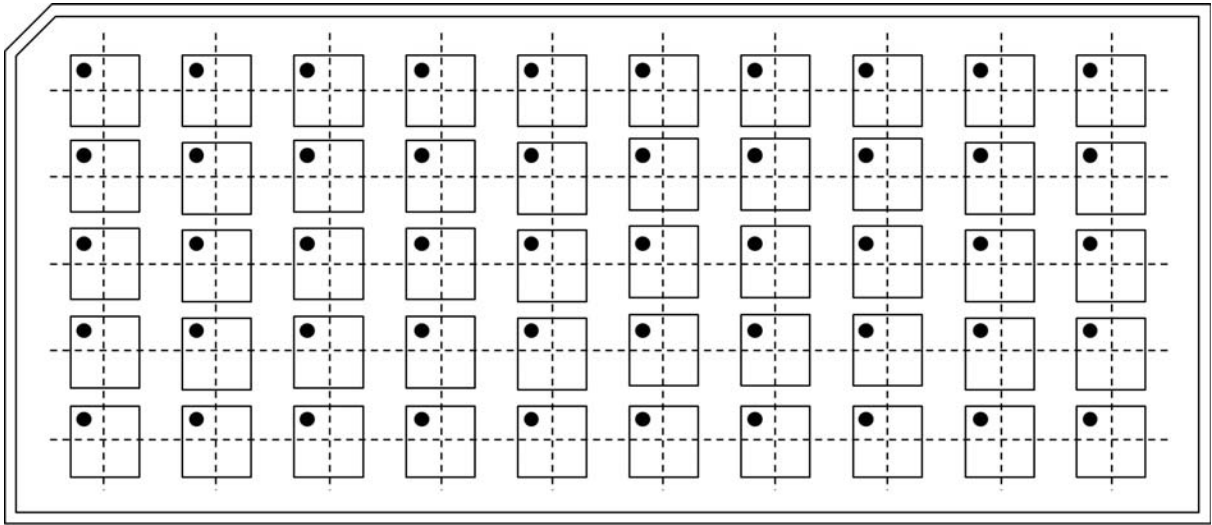
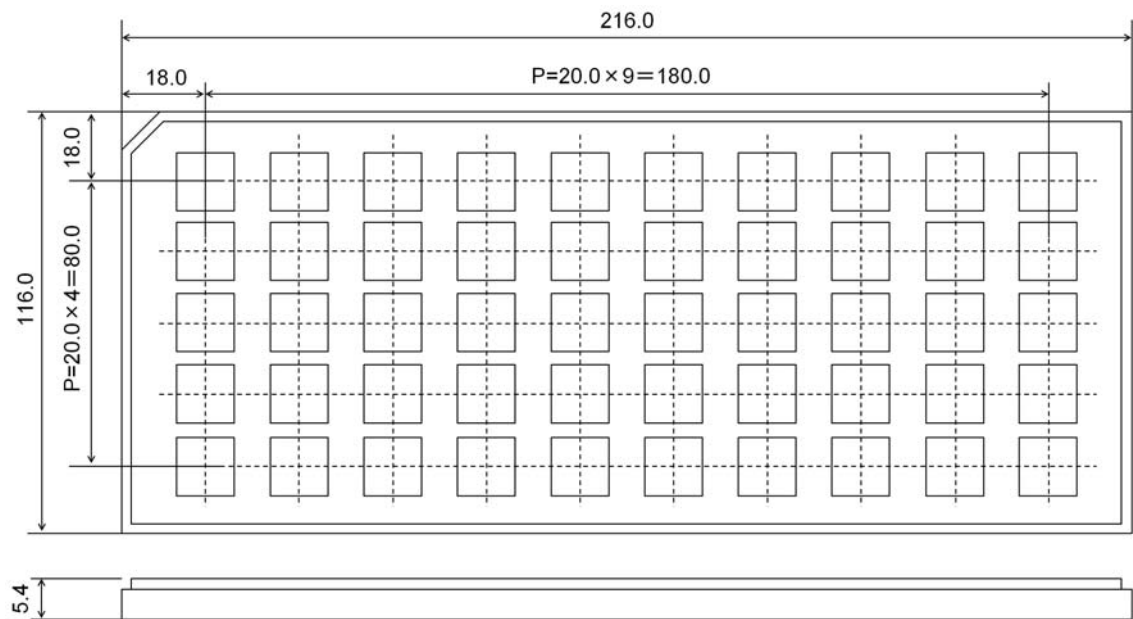


Fig.1 Quadrant Assignments for PIN 1 Orientation in Tray

3.2 Use material

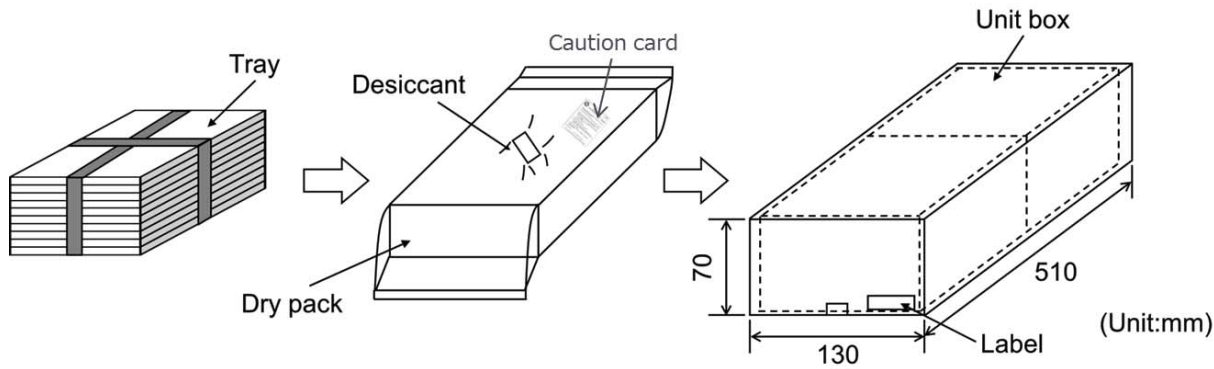
Item	Material
Tray	PPE
Desiccant	Clay
Envelope	Aluminum-laminated
Unit box	Cardboard
Shipping box	Cardboard

3.3 Tray Specification
3.3.1 Tray Dimension

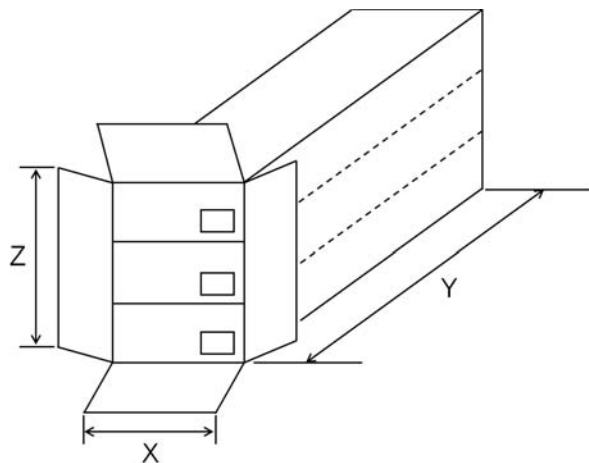


(unit:mm)

3.4 Packing Method
20 tray(s) or less per unit box



3.5 Packing Style
3 unit boxes or less per shipping box



(unit:mm)

Shipping Box Dimension	
X	136
Y	579
Z	230

3.6 Label Specification



3.7 Caution card specification

Caution

This bag contains

MOISTURE-SENSITIVE DEVICES

LEVEL

If blank, see adjacent bar code label

1. Calculated shelf life in sealed bag: 72 months at <40°C and <90% relative humidity (RH)

2. Peak package body temperature: _____ °C
If blank, see adjacent bar code label

3. After bag is opened, devices that will be subjected to reflow solder or other high temperature process must be

a) Mounted within: _____ hours of factory conditions
If blank, see adjacent bar code label
≤30°C/60% RH, or

b) Stored per J-STD-033

4. Devices require bake, before mounting, if:

a) Humidity Indicator Card reads >10% for level 2a - 5a devices or >60% for level 2 devices when read at 23 ± 5°C

b) 3a or 3b are not met

5. If baking is required, refer to IPC/JEDEC J-STD-033 for bake procedure

Bag Seal Date: _____
If blank, see adjacent bar code label

Note: Level and body temperature defined by IPC/JEDEC J-STD-020

Remark) Standard item 1. calculated shelf life in caution card is not applied for MSL1 product.

3.8 Indicator card specification

HUMIDITY INDICATOR

Complies with IPC/JEDEC J-STD-033

LEVEL

2 PARTS

Bake parts if 60% is NOT blue

60%

Lot Number

LEVEL

2A-5A PARTS

Bake parts if 10% is NOT blue and 5% is pink

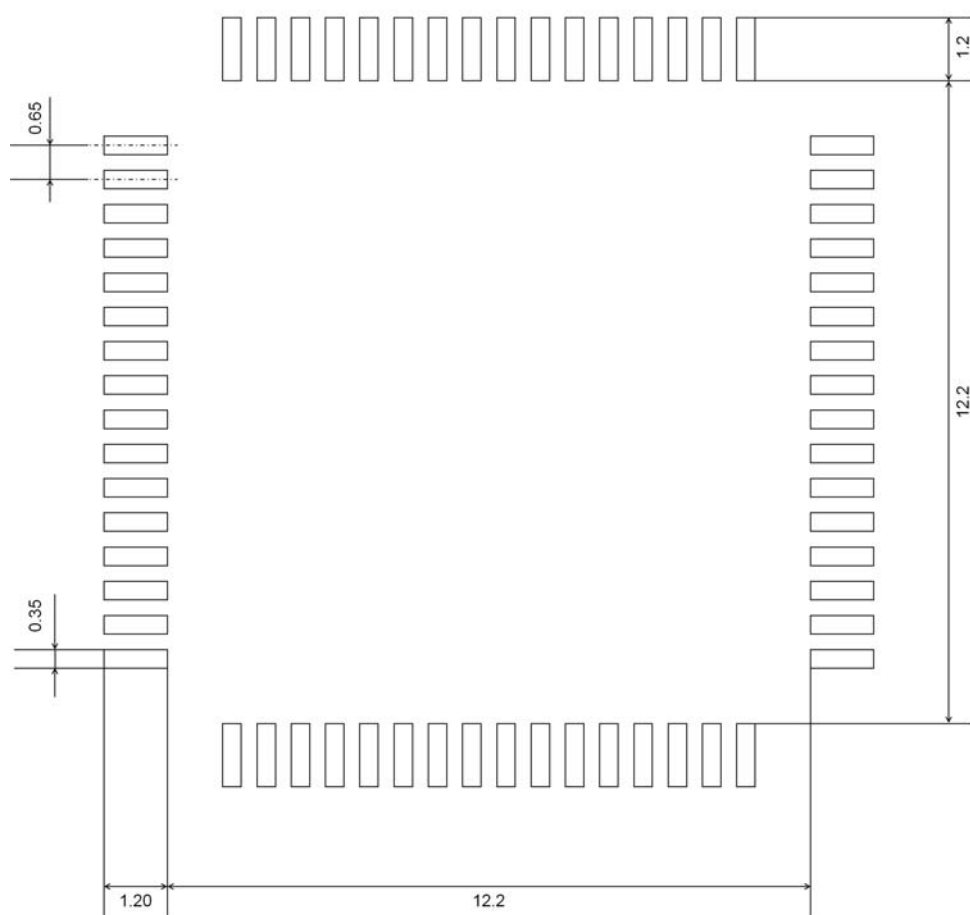
10%

Manufacturer Identification

5%

Do not put this card into a bag if 60% is pink

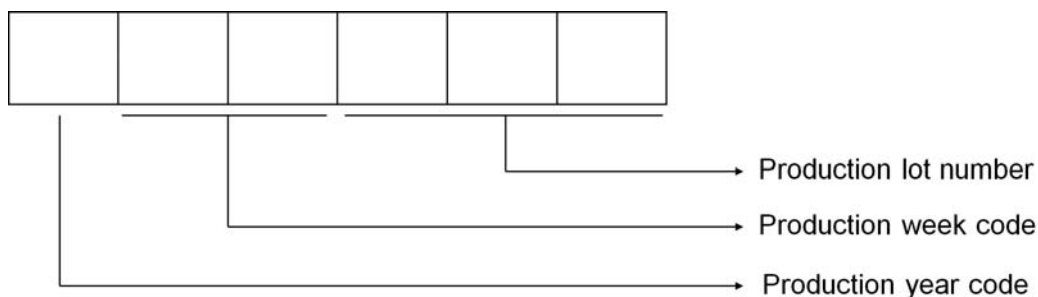
4. Footprint dimensions



(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	-	70	% RH

6.2 Storage period(Start to count since delivery date)

	Min.	Max.	Unit
Storage period	-	1	year

6.3 Specified storage period until soldering

	Min.	Max.	Unit
Acceptable time	-	168	hour

The above value is a time from opening the moisture-proof packaging until the s

Cases where it is necessary to perform the drying process is the following.

Case 1 : in excess of the above-mentioned "Acceptable time"

Case 2 : it has passed more than 6 years not open

Recommended the dry process conditions

	Temperature [°C]	Time [hour]
Tray	125	24

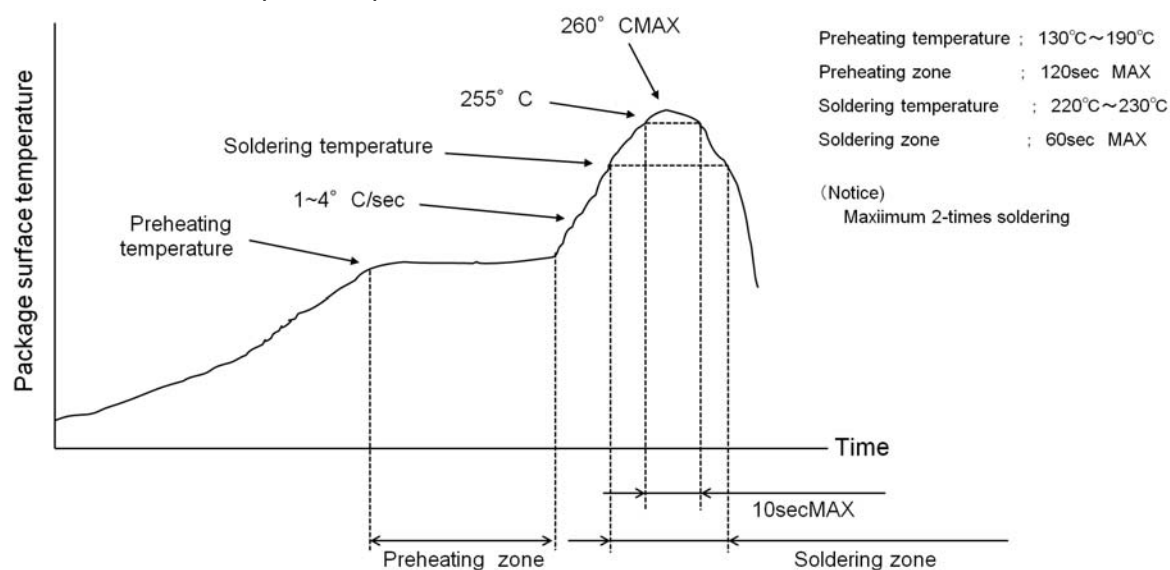
The drying process is the impact on the solderability because the oxidation of the terminal portion will occur. Therefore, specify the maximum times of the dry processing as follows:

Recommended execution count of the dry process

	Min.	Max.	Unit
Execution count	-	2	times

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 for solder iron

- (1) Solder mounting time is the sec per 1 lead

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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