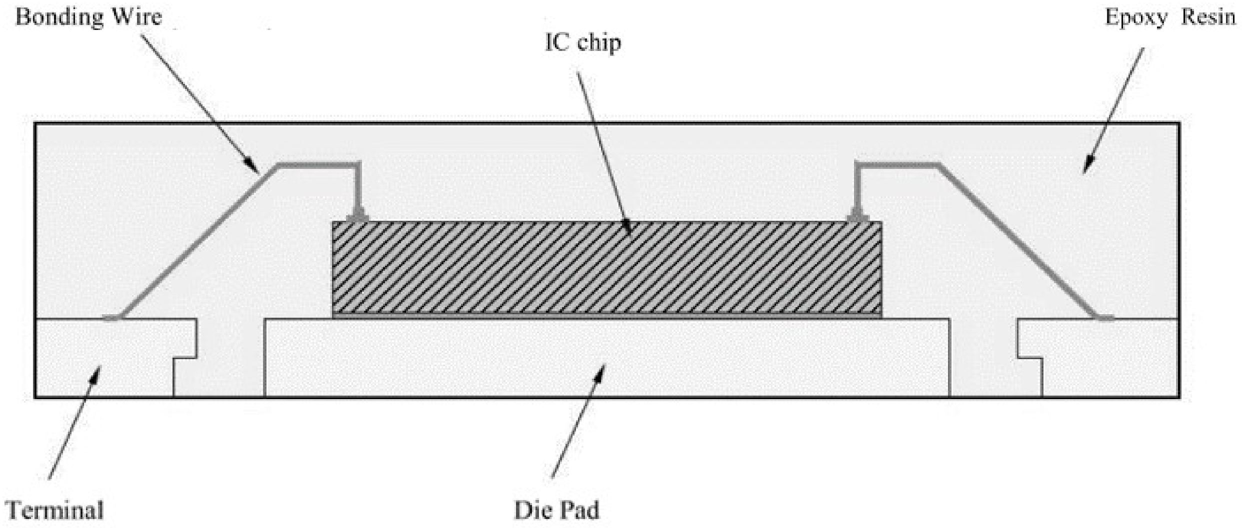
1. Package Information

Package Name	P-WQFN64-0909-0.50-63
Type	QFN
Pin Count	64
Package Weight [g]	0.203
Lead Finish	Ni/Pd/Au
MSL	Level3

2. Package Structure



3. Packing Specification

3.1 Packing form, Quantity, PIN1 Orientation

Packing Form	Tray
Packing Quantity [pcs]	260
PIN 1 Orientation	Following figure

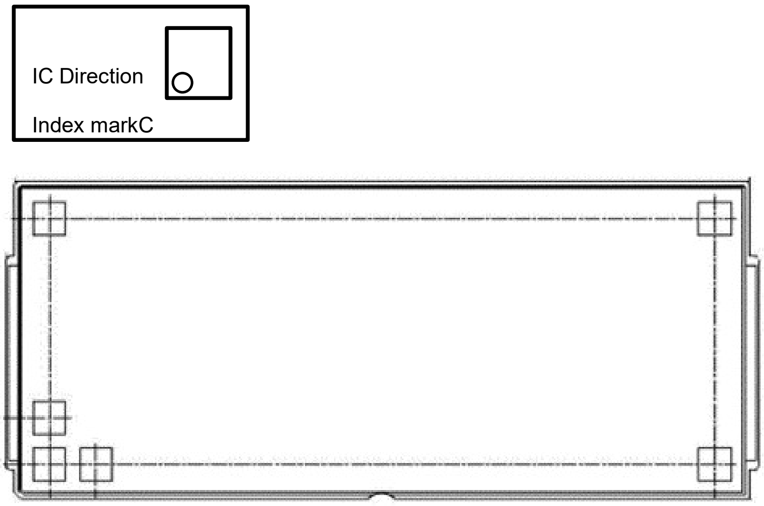


Figure 1：Direction of PIN1 Orientation

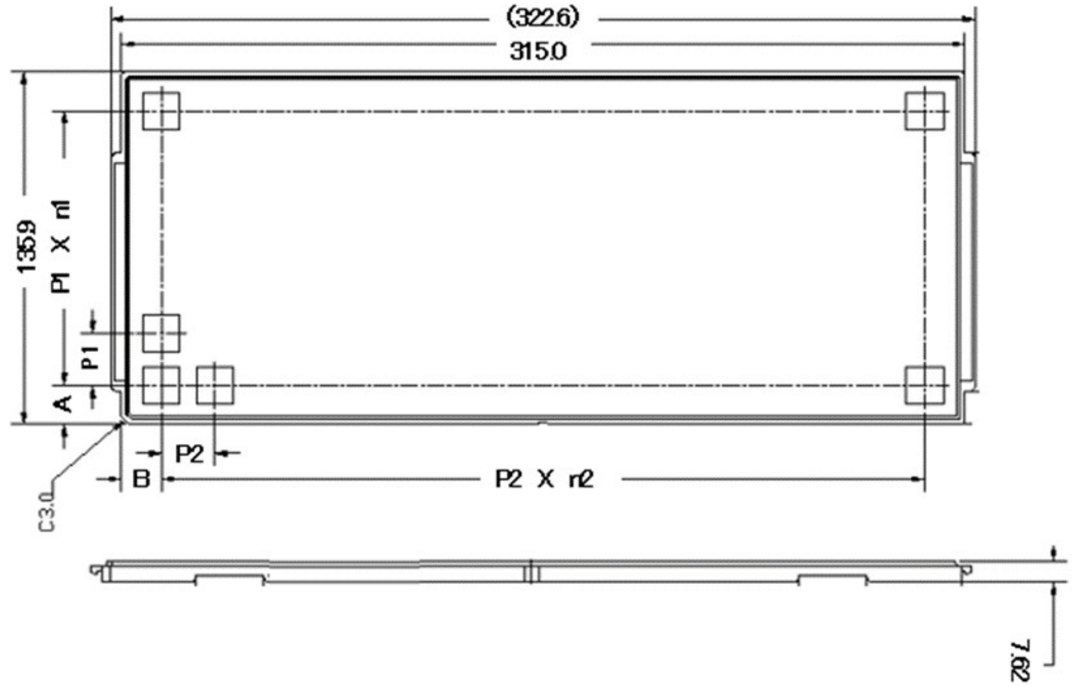
3.2 Use material

Item	Material
Tray	PPE
Desiccant	Clay
Moisture Proof Pack	Aluminum laminating bag
Unit box	Corrugated cardboard
Shipping box	Corrugated cardboard

3.3 Tray Specification

3.3.1 Tray Dimension

Dimension (mm)	A	P1	n1	B	P2	n2
	10.35	12.8	9	10.0	11.8	25

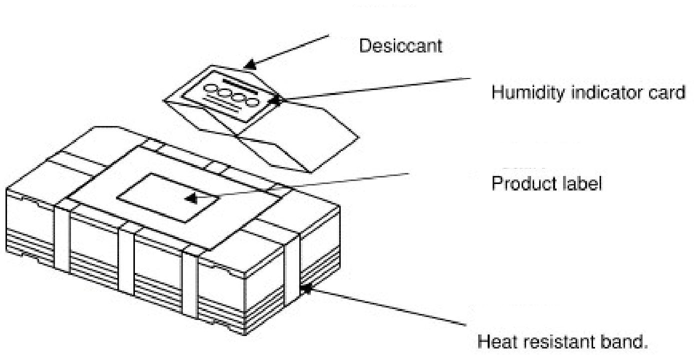


(Unit:mm)

3.4 Packing Method

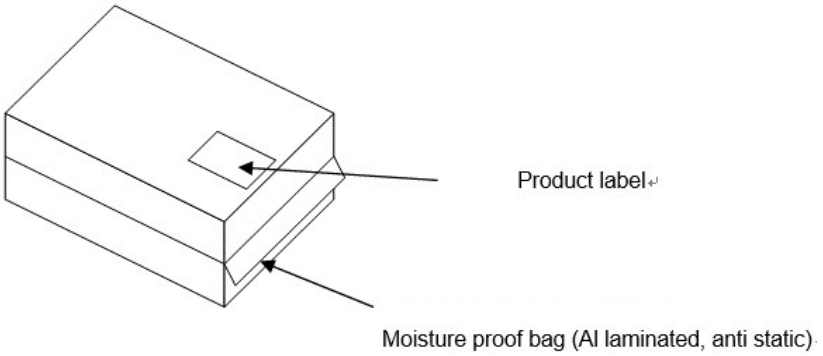
3.4.1 Bundling of the trays.

Trays are bundled in the same direction. A bundle of trays consists of 1 top empty tray + 10 trays.



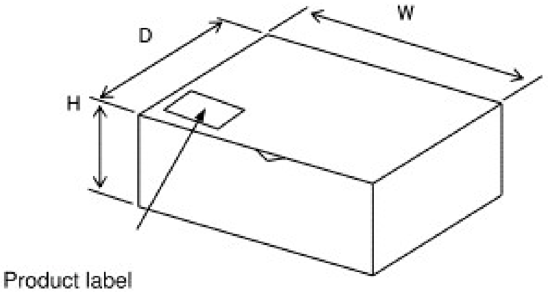
3.4.2 Moisture proof package.

A bundle of trays with ICs should be stored in a moisture proof bag together with a desiccant and indicator card.



3.4.3 Stores the inner box.

Store the moisture proof packaged tray in the inner box.



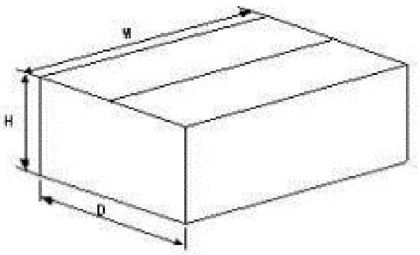
(unit:mm)

Shipping Box Dimension	
W	387
D	191
H	130

3.5 Packing Style

Store the inner box in the Outer box.（Maximum, 4 inner boxes enter.）

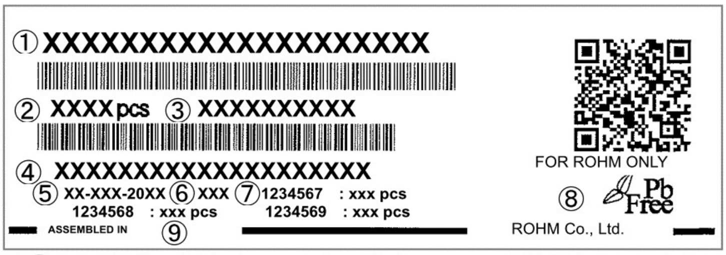
※Please refer to notice.



(unit:mm)

Shipping Box Dimension	
W	405
D	399
H	283

3.6 Label Specification



①XXXXXXXXXXXXXXXXXXXXX

② XXXXpcs ③ XXXXXXXXXX

④ XXXXXXXXXXXXXXXXXXXX

⑤ XX-XXX-20XX ⑥XXX ⑦1234567 : xxx pcs
1234568 : xxx pcs 1234569 : xxx pcs

ASSEMBLED IN ⑨

FOR ROHM ONLY

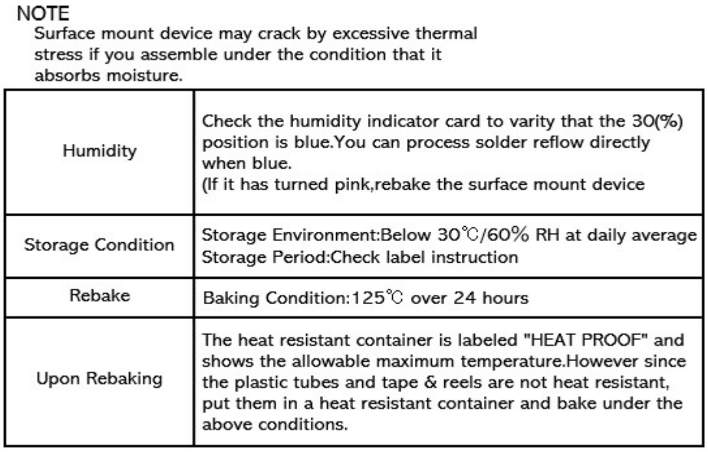
⑧ Pb Free

ROHM Co., Ltd.

※⑦ロット混載の場合は、ロット毎に捺印ロット No.と数量を表記します。

①社外品名 Product No
②数量 Quantity
③ロット No. LotNo.
④社内品名 Internal Product No
⑤パック日 Date of pack
⑥開封後保管期限 Usage period after opening
⑦捺印ロットNo.（数量） Marking Lot number(Quantity)
⑧鉛フリー表示 Pb Free
⑨原産国 Country of origin

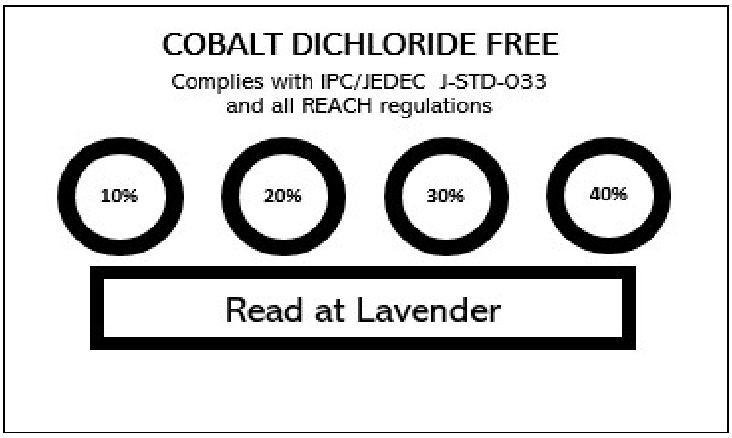
3.7 Caution card specifications



NOTE
Surface mount device may crack by excessive thermal stress if you assemble under the condition that it absorbs moisture.

Humidity	Check the humidity indicator card to varity that the 30(%) position is blue.You can process solder reflow directly when blue. (If it has turned pink,rebake the surface mount device
Storage Condition	Storage Environment:Below 30℃/60% RH at daily average Storage Period:Check label instruction
Rebake	Baking Condition:125℃ over 24 hours
Upon Rebaking	The heat resistant container is labeled "HEAT PROOF" and shows the allowable maximum temperature.However since the plastic tubes and tape & reels are not heat resistant, put them in a heat resistant container and bake under the above conditions.

3.8 Indicator card specifications

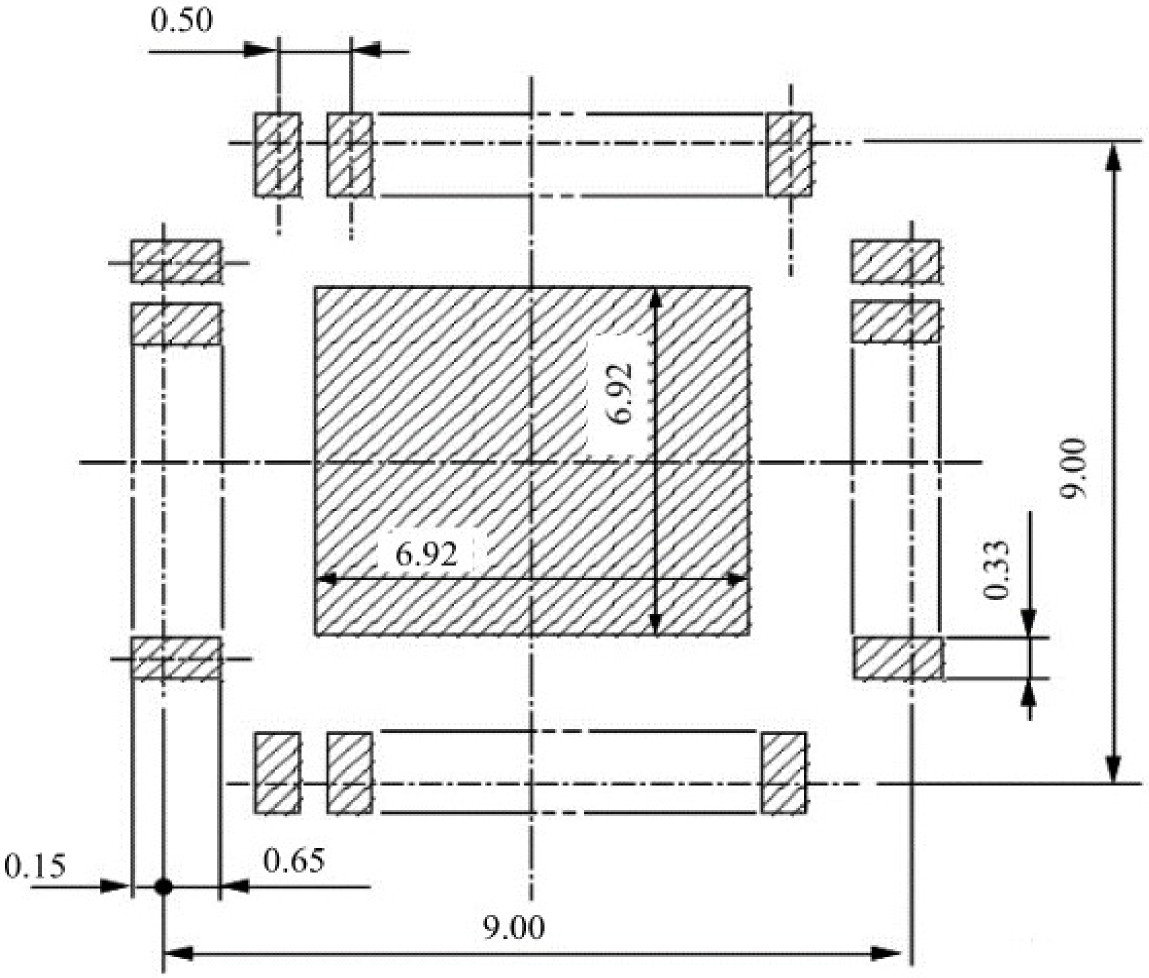


COBALT DICHLORIDE FREE

Complies with IPC/JEDEC J-STD-033
and all REACH regulations

Read at Lavender

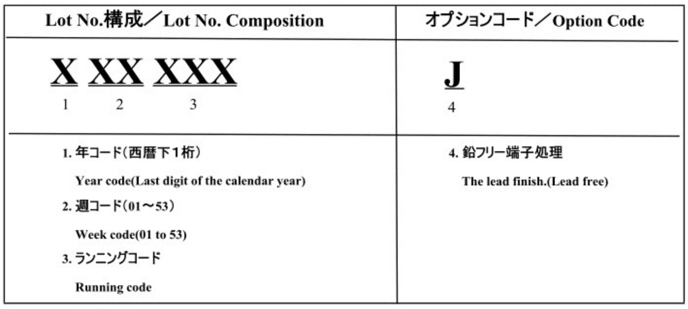
4. Mounting area for packege lead soldering to PC boards



(unit:mm)

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

5. Marking Specification



Lot No.構成／Lot No. Composition	オプションコード／Option Code
X XX XXX 1 2 3	J 4
1. 年コード（西暦下１桁） Year code(Last digit of the calendar year) 2. 週コード（01～53） Week code(01 to 53) 3. ランニングコード Running code	4. 鉛フリー端子処理 The lead finish.(Lead free)

6. Storage conditions

6.1Storage environment

6.1.1 Recommended storage conditions(Unopened)

	Min.	Max.	Unit
Temperature	-	40	°C
Humidity	-	85	% RH

6.1.2 Recommended storage conditions(After opening a letter of the moisture proof packing)

	Min.	Max.	Unit
Temperature	5	30	°C
Humidity	30	60	% RH

※Instantaneously exceeding these values does not affect the products.

6.2 Storage period

6.2.1 Storage period（Dry pack day counting）

	Min.	Max.	Unit
Storage period	-	5	year

6.2.2 Storage period（Delivery day counting）

	Min.	Max.	Unit
Storage period	-	1	year

6.3 Allowable time to implementation after opening a letter of the moisture proof packing

	Min.	Max.	単位
Permission time	-	168	hours

How to treat Overtimed Products

Products packed with heat-resistant tray must be baked as following baking condition.
Products packed with a magazine and tape and reel cannot be baked in that packaging for
Products must be baked after being put in a metal magazine tube or a heat-resistant tray.

6.3.1 Recommended dry processing condition

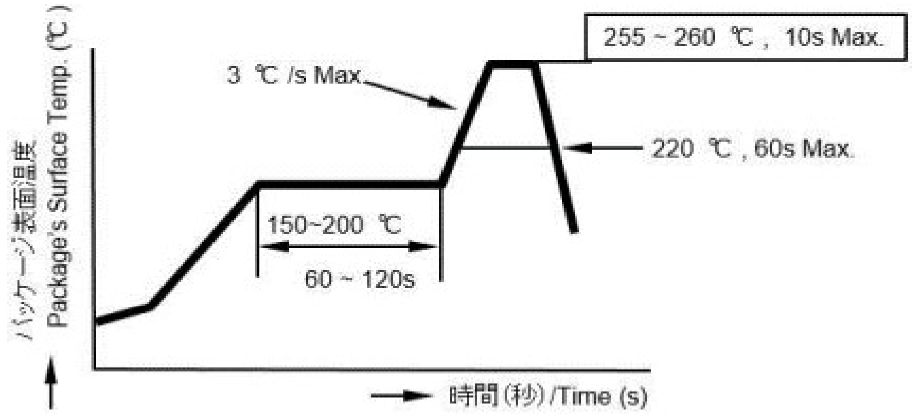
	Temperature [°(	Time[h]
Tray	125±5	24

6.3.2 The allowable number of times to dry

	Min.	Max.	Unit
Permission time	-	5	time

7. Soldering conditions

7.1 Recommended temperature profile for reflow



7.2 Recommended condition for wave soldering

It is a non compliant package

7.3 Recommended condition for solder iron

Lead temperature: 260 °C , 10s or 380 °C ,5s max. (Package surface temperature: 150 °C max.)

Notice

Precaution for Mounting / Circuit board design

1. When a highly active halogenous (chlorine, bromine, etc.) flux is used, the residue of flux may negatively affect product performance and reliability.

2. In principle, the reflow soldering method must be used on a surface-mount products, the flow soldering method must be used on a through hole mount products. If the flow soldering method is preferred on a surface-mount products, please consult with the ROHM representative in advance.
3. When laying out PC boards,it is important to design the foot pattern so as to give consideration to ease of mounting, bonding,positioning of parts,reliability,wiring,and elimination of solder bridges.The optimum design for the foot pattern varies with the materials of the substrate,the sort and thickness of used soldering paste,and the way of soldering. Therefore when laying out the foot leads are allwable for soldering to PC boards.
4. Boards must be mounted within twice and within maximum temperature of temperature profile for the far infrared reflow (IR) as following. In addition, set lead surface temperature is 235 ℃ and more during reflow to ensure wettability.

Precaution for Storage / Transportation

1. This packing is designed so that an IC is not damaged during transportation.
   However, IC damage may occur when it takes strong shocks such as falls.

2. Reflow（Soldering）
   Since surface mount type IC packages may have a crack when thermal stress is applied during reflow solderingprocess after absorbing atmospheric moisture, you must take a reflow soldering treatment for those IC packages soon after taking them out of the drypack bag.You must take a reflow treatment in the time described on the label of the bag which differs depending on the type of IC packages.

3. Humidity indicator card
   If you find a pink color card (with a 30% mark) soon after opening the bag, it shows the penetration of moisture through a broken bag.

4. It is dealt with the case beyond the period in an opening a letter state
   The baking conditions: 125 °C ±5 °C and 24hours. After bake-drying, reflow according to the period indicated on the label on the moisture-proof bag for each product.
   The heat resistant tray is marked with “HEAT PROOF” or heat resistant temperature on its surface. If you use a non heat resistant tray, make a bake drying after putting ICs in a heat resistant case. At that time, take care not to make IC leads bend.

5. Storage conditions
   Please avoid the storage at the water wet, outdoor leaving, the place of high temperature and humidity, The place with the sudden temperature change, the place where there are many a place, earthly affairs that corrosive gas produces.
   An inner box and the outer box use a cardboard box. As for the corrugated cardboard, strength deteriorates by period and humidity and loading condition. Please carry out a principle of the first in/first out strictly.

6. The number of inner boxes and outer box size is subject to change depending on the number of ICs to be shipped.
   (Lot numbers, order numbers)
7. If you apply force that causes the embossed carrier tape or cover tape to bend, there is a risk of bending the lead or misalignment of the storage in the tape.
   Handle with care.

Precaution for Product Label

A two-dimensional barcode printed on ROHM Products label is for ROHM’s internal use only.