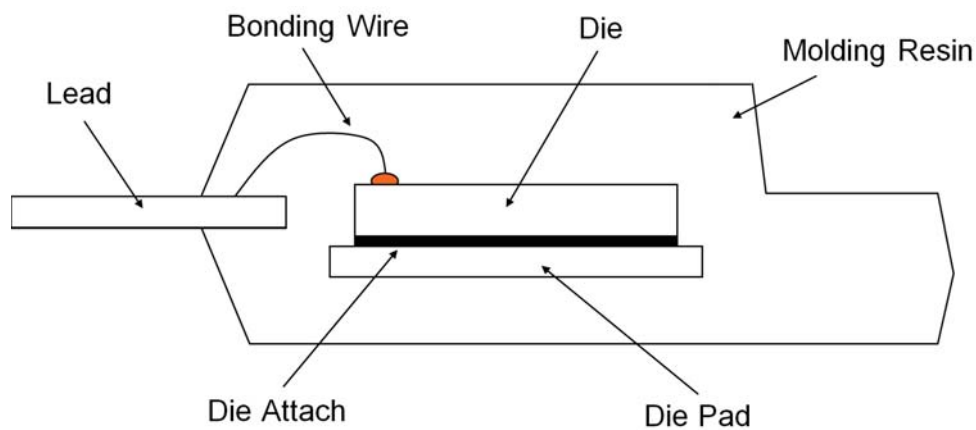


## 1. Package Information

Package Name	TO220FP-5
Type	TO
Pin Count	5
Outline Dimension	-
Drawing No.	-
Package Weight [g]	1.8
Lead Finish	Pure Tin
MSL Level	N/A

## 2. Package Structure



3. Packing Specification

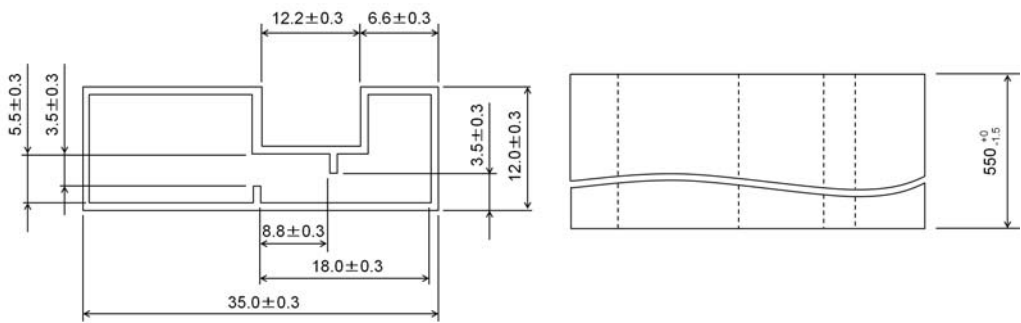
3.1 Packing form, Quantity

Packing Form		Tube
Packing Quantity	[pcs]	50

3.2 Use material

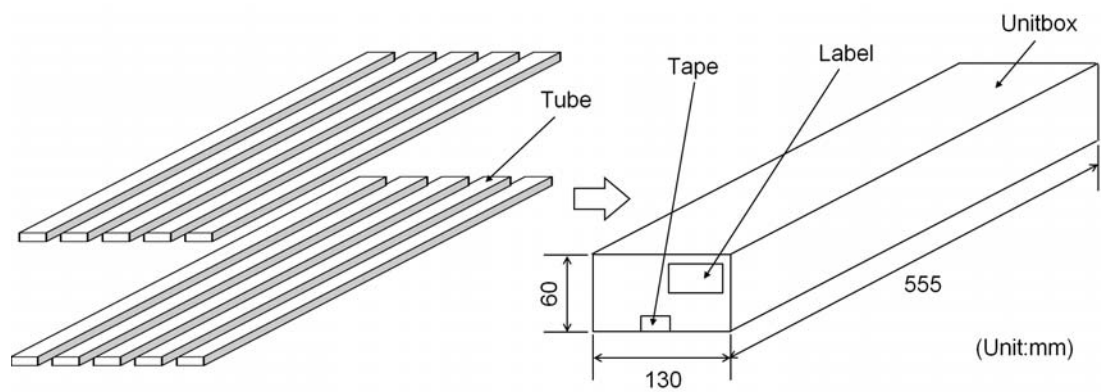
Item	Material
Tube	PC
Stopper	TPE
Unit box	Cardboard
Shipping box	Cardboard

3.3 Tube Specification  
3.3.1 Tube Dimension

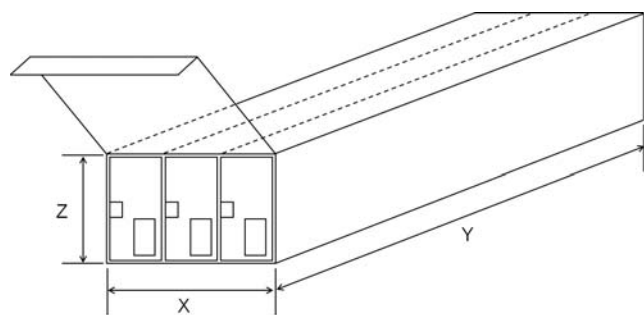


(unit:mm)

3.4 Packing Method  
10 tube(s) or less per unit box



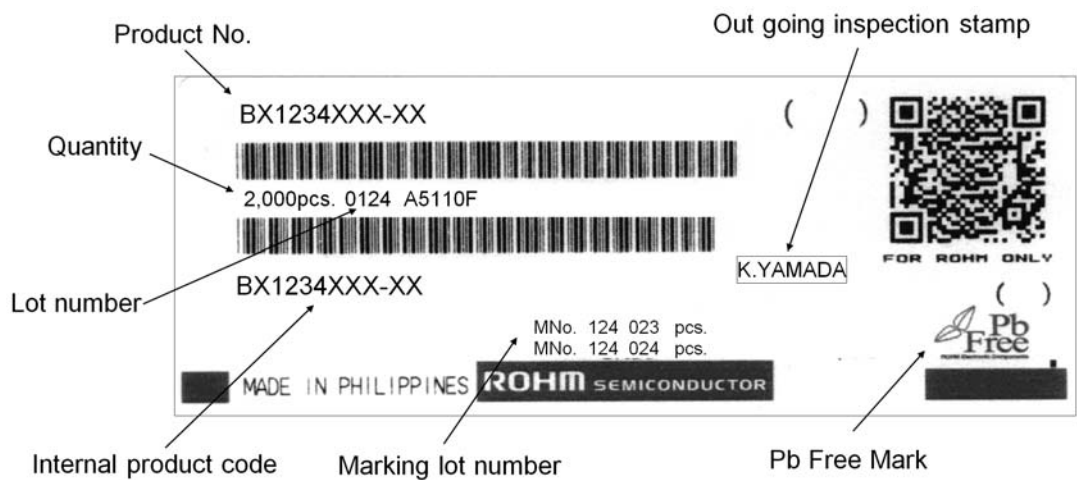
3.9 Packing Style  
3 unit boxes or less per shipping box



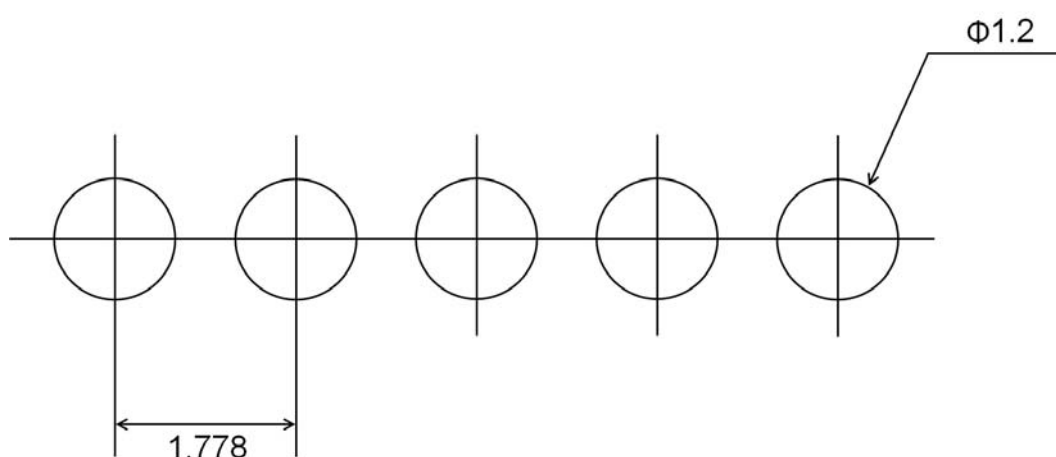
(unit:mm)

Shipping Box Dimension	
X	230
Y	579
Z	136

3.10 Label Specification



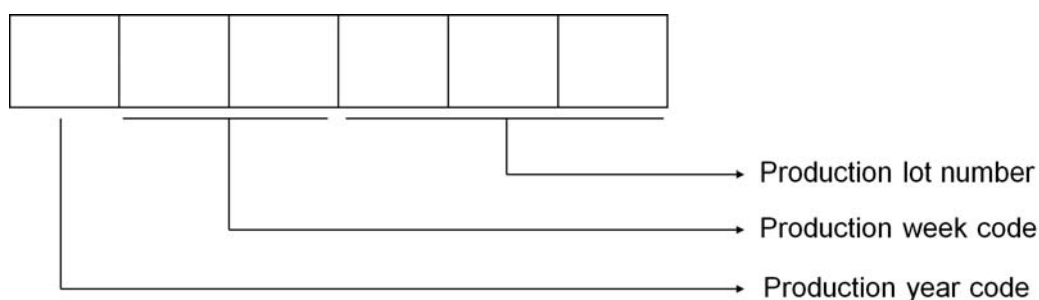
## 4. Footprint dimensions



(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 condition for wave soldering

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

### 7.2 Recommended condition for solder iron

Solder iron temperature	:	380 °C or less
Mounting time	:	4 s 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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- 4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.
- 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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