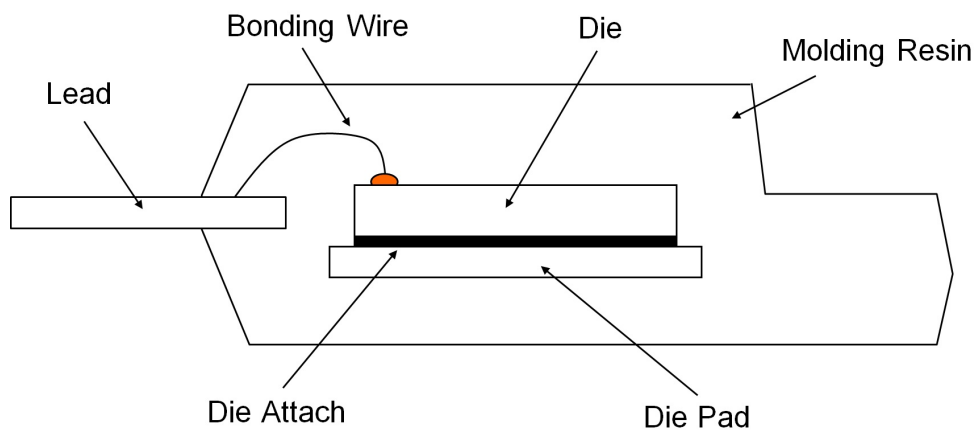


## 1. Package Information

Package Name	TO220FP-5
Type	TO
Pin Count	5
Outline Dimension	EX533-5002
Drawing No.	
Package Weight [g]	1.8
Lead Finish	Pure Tin
MSL Level	Level1

## 2. Package Structure



### 3. Packing Specification

#### 3.1 Packing form, Quantity

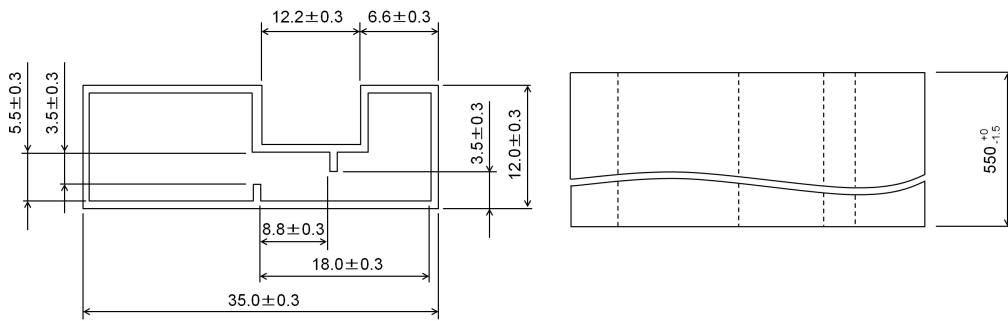
Packing Form		Tube
Packing Quantity	[pcs]	50

#### 3.2 Use material

Item	Material
Tube	PVC
Stopper	PVC
Unit box	Cardboard
Shipping box	Cardboard

3.3 Tube Specification

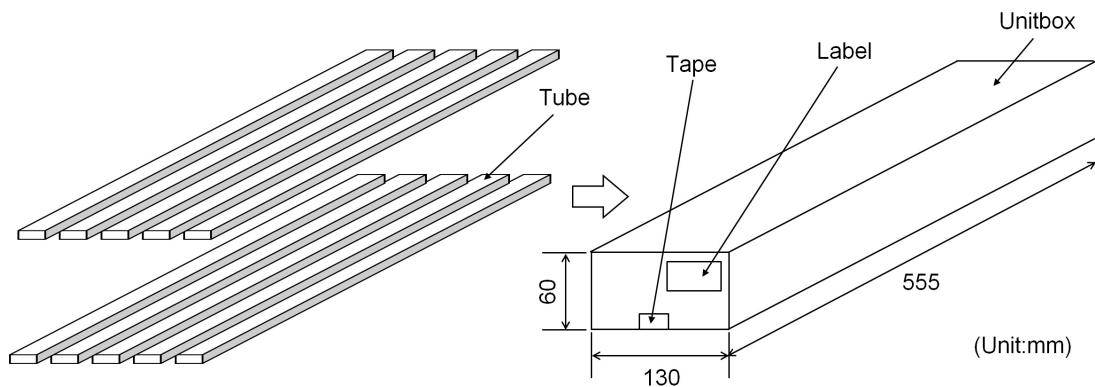
3.3.1 Tube Dimension



(unit:mm)

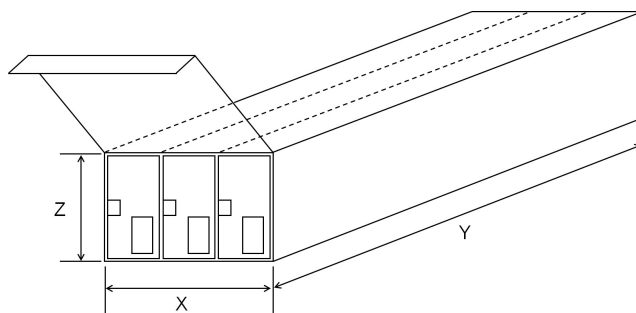
3.4 Packing Method

10 tube(s) or less per unit box



3.9 Packing Style

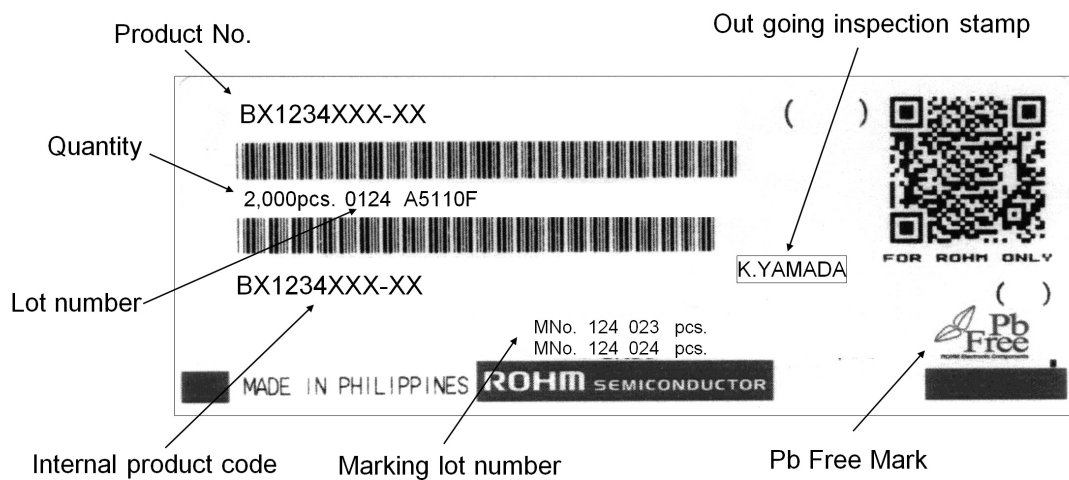
3 unit boxes or less per shipping box



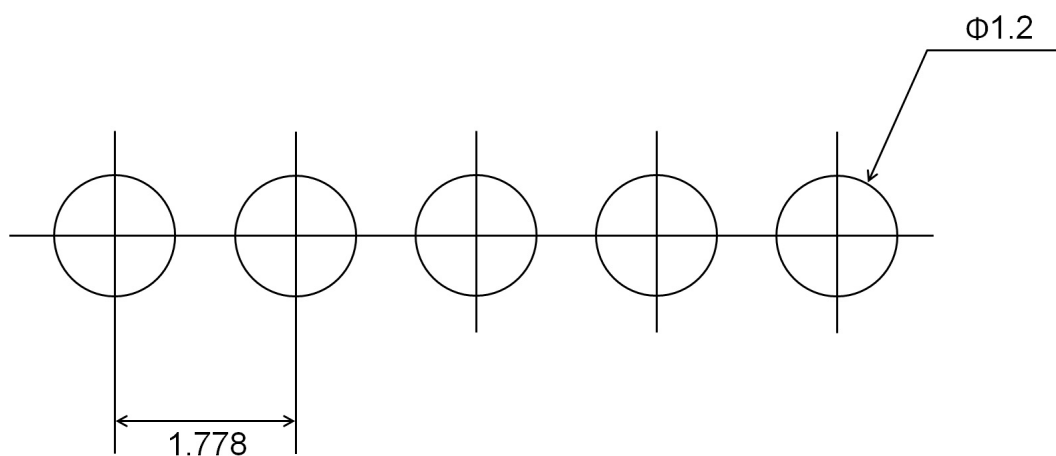
(unit:mm)

Shipping Box Dimension	
X	230
Y	579
Z	136

3.10 Label Specification



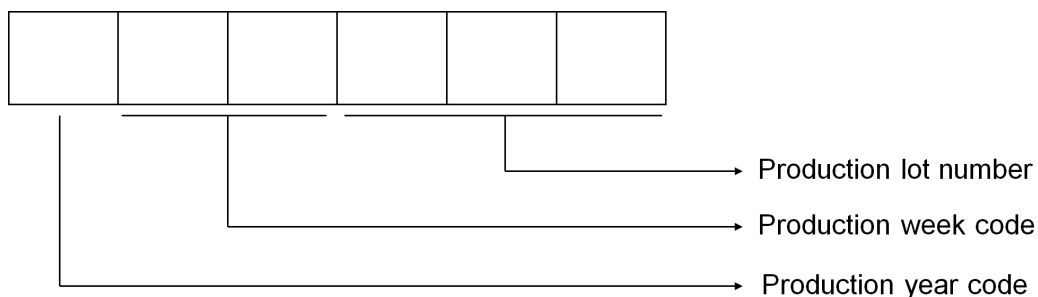
## 4. Footprint dimensions



(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 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.

## 7.2 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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