# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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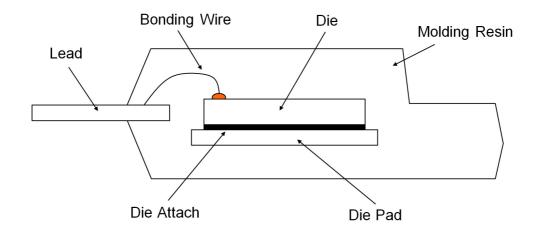




1. Package Information

Package Name	TO220FP-3
Туре	ТО
Pin Count	3
Outline Dimension Drowing No.	EX532-5001
Package Weight [g]	1.8
Lead Finish	Pure Tin
MSL Level	Level1

2. Package Structure



#### 3. Packing Specification

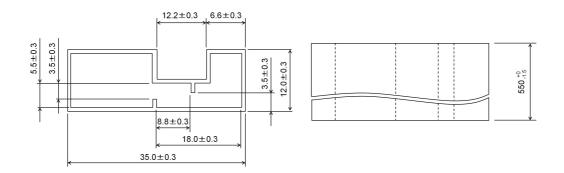
3.1 Packing form, Quar	ntity	
Packing Form		Tube
Packing Quantity	[pcs]	50

#### 3.2 Use material

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

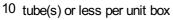
#### 3.3 Tube Specification

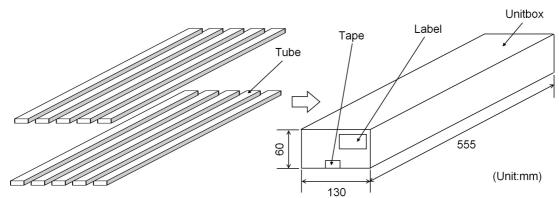
3.3.1 Tube Dimension



(unit:mm)

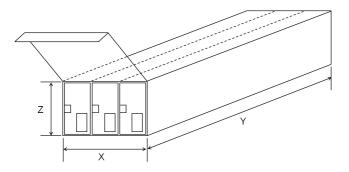
#### 3.4 Packing Method





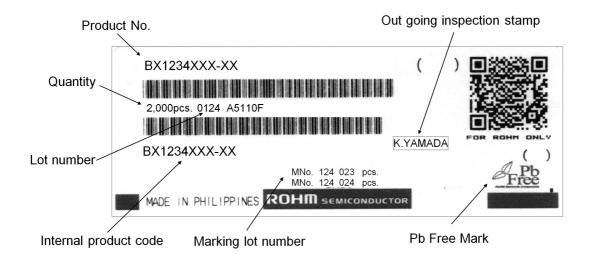
#### 3.9 Packing Style

3 unit boxes or less per shipping box

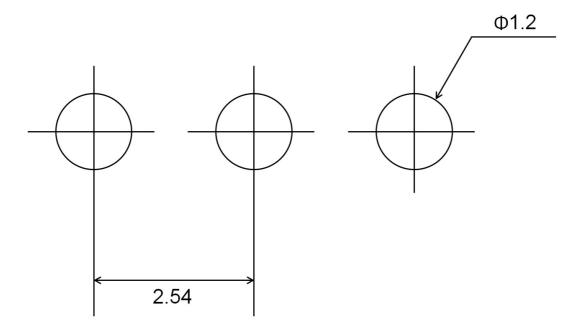


	(unit:mm)
Shipp	ing Box Dimension
Х	230
Y	579
Z	136

3.10 Label Specification



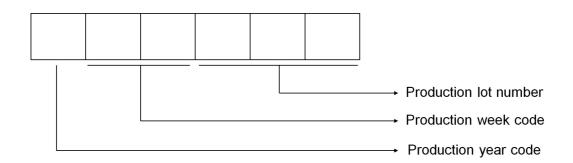
#### 4. Footprint dimensions



(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 stora	ge 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 15	50	°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

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3)	Although ROHM is continuously working to improve product reliability and quality, semicon- ductors can break down and malfunction due to various factors. Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Poducts beyond the rating specified by ROHM.
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