



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Product Specifications Approval Sheet

Product Name: IF SAW Filter 190 MHz(SMD 5X5)

TST Parts No.:TB0293A

Customer Parts No.: \_\_\_\_\_

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ Andy Yu *Andy*

Approval by: \_\_\_\_\_ Francis Chen *Francis*

Date: \_\_\_\_\_ 2011/09/06

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes



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## IF SAW Filter 190MHz SMD 5X5mm

MODEL NO.: TB0293A

REV. NO.:2.0

### A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ +80 °C
2. Storage Temperature: -40 °C ~ +85 °C



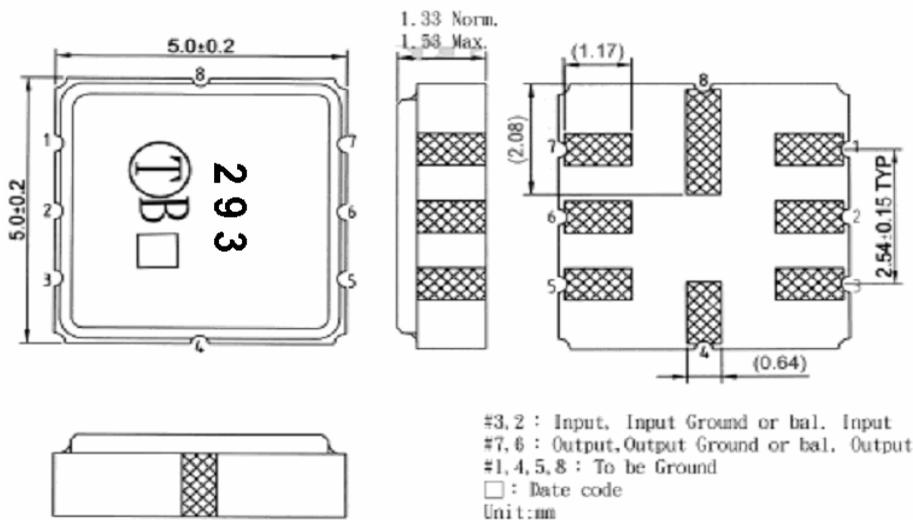
### B. Characteristics :

Electrostatic Sensitive Device (ESD)

1. Ambient Temperature: 25 °

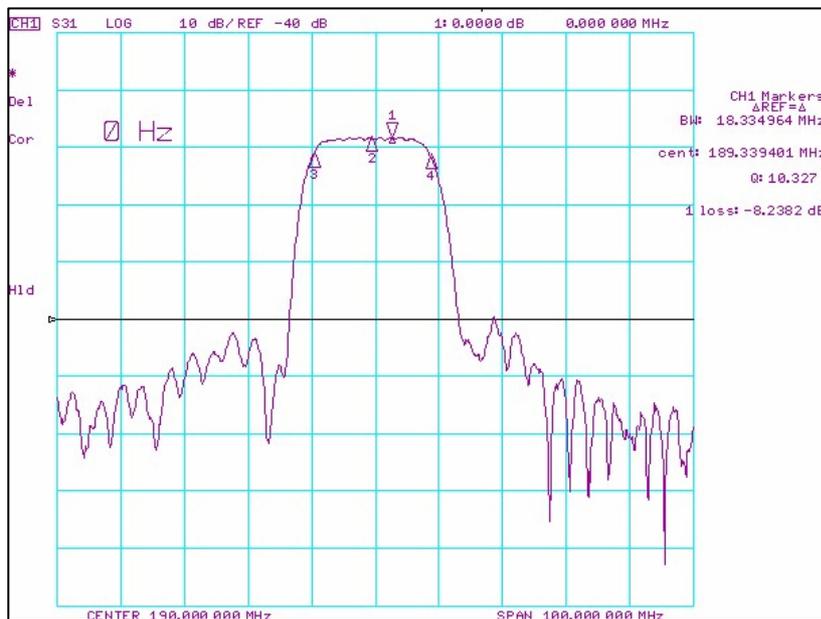
Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency	$F_C$ MHz	-	190	-	-
1dB Bandwidth	MHz	10	15		
3dB Bandwidth	MHz	-	18	-	-
Maximum Insertion loss	I.L. dB	-	8.0	10	-
Passband Ripple (185~195MHz)	dB	-	0.8	1	-
Group Delay Ripple (185~195MHz)	nS	-	46	100	-
Attenuation:( Reference level from minimum insertion loss)					
1)	DC ~ 100 MHz	45	54	-	-
2)	100 ~ 149 MHz	30	34	-	-
3)	190 ~ 250 MHz	30	34	-	-
4)	250~ 300 MHz	45	50	-	

### C.OUTLINE DRAWING:



## D. Frequency Characteristics :

### 1. S21 Response



Horizontal : 10MHz/Div

Vertical : 10dB/Div

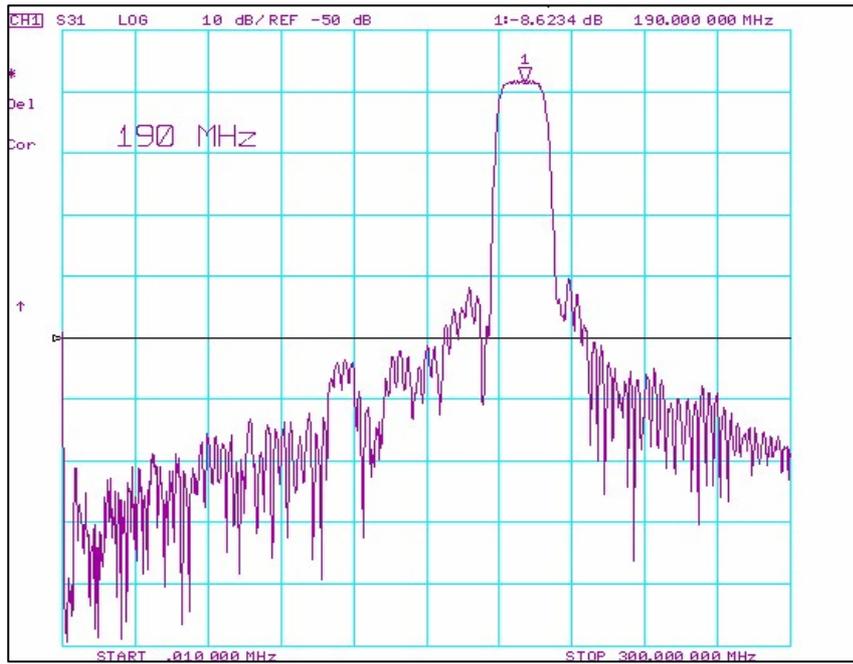
### 2. Pass band Ripple and Group Delay Ripple



Horizontal : 3MHz/Div

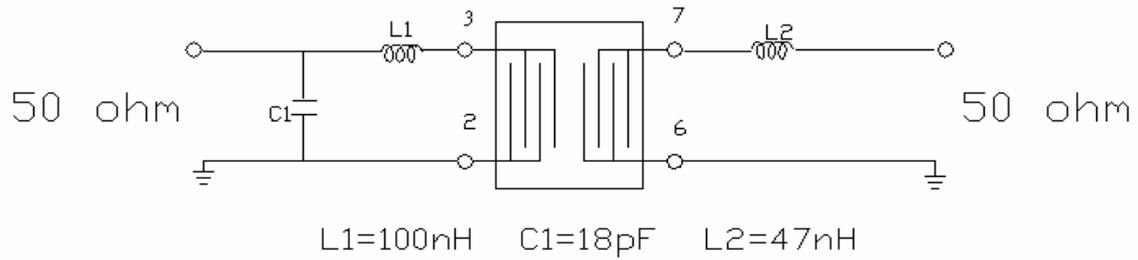
Vertical : 1dB/Div ; 100nS/Div

### 3. Wide band Response

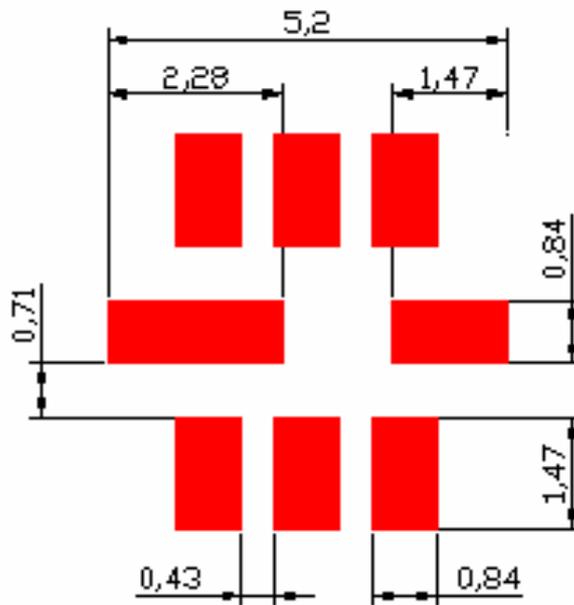


Horizontal : 10MHz~300MHz

### E. TEST FIXTURE :

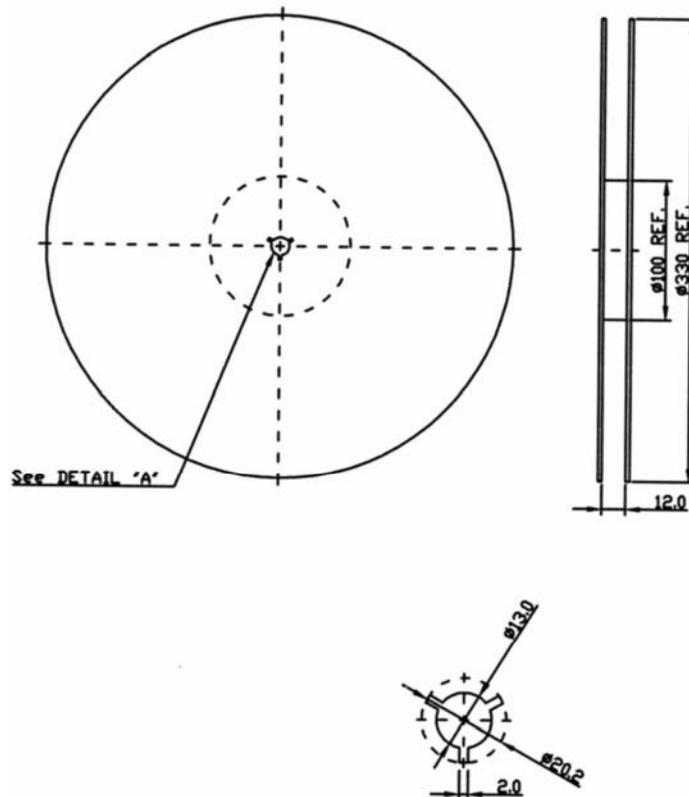


## F. PCB FOOTPRINT

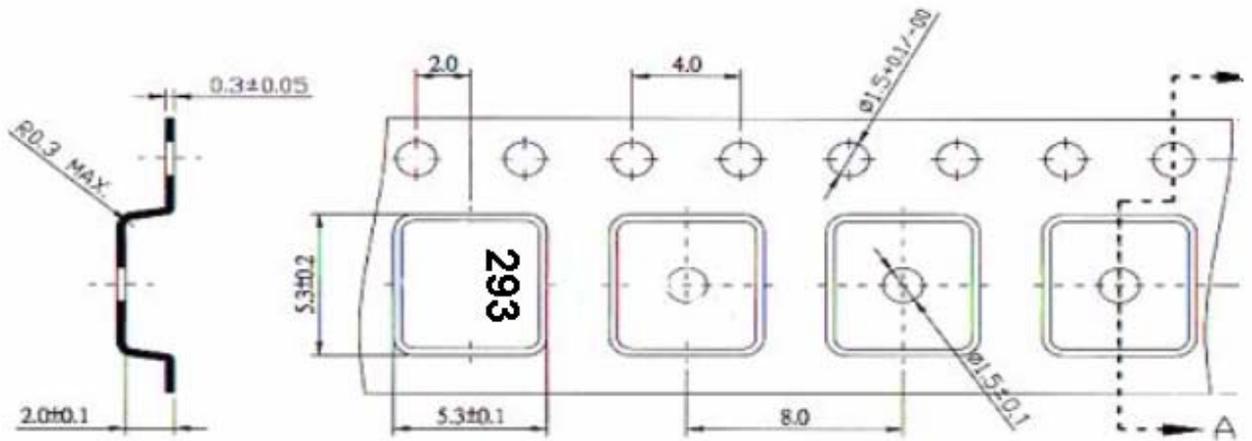


## G. PACKING:

### 1. REEL DIMENSION



## 2. TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE:

