



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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Product Specifications Approval Sheet

Product Description: 261.12MHz 5MHz BW SMD 13.3×6.5mm SAW Filter

TST Part No.: TB0204A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Marco Huang *Marco Huang*

Approved by: _____ Bob Chau *Bob Chau*

Date: _____ 09/15/2015

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 261.12MHz(BW=5MHz) SMD 13.3X6.5mm

MODEL NO.: TB0204A

REV.3.0

A. MAXIMUM RATING:

1. Operating Temperature: -30 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input power: 10dBm

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. ELECTRICAL CHARACTERISTICE:

Ambient Temperature: 25 °C

Characteristics	Value			Note
	Min.	Typ.	Max.	
Center frequency F_C MHz	-	261.12	-	-
Minimum Insertion loss I.L. dB	-	11.5	12	-
Lower 1 dB Bandedge MHz	-	258.6	259.2	-
Upper 1 dB Bandedge MHz	263.04	263.5	-	-
Lower 15 dB Bandedge MHz	257.12	257.7	-	-
Upper 15 dB Bandedge MHz		264.5	265.12	
Phase Linearity (259.2~263.04MHz)(rms) deg	-	1.8	4	-
Attenuation: (Reference level from minimum insertion loss)				dB
1) 161.12 MHz~241.12 MHz dB	43	48	-	-
2) 241.12 MHz~253.12 MHz dB	43	47	-	-
3) 269.12 MHz~281.12 MHz dB	43	47	-	-
4) 281.12 MHz~361.12 MHz dB	43	50	-	-
Substrate Material		LiTaO ₃		

C. FREQUENCY CHARACTERISTICE:

1. S21 Response: (span : 50MHz)

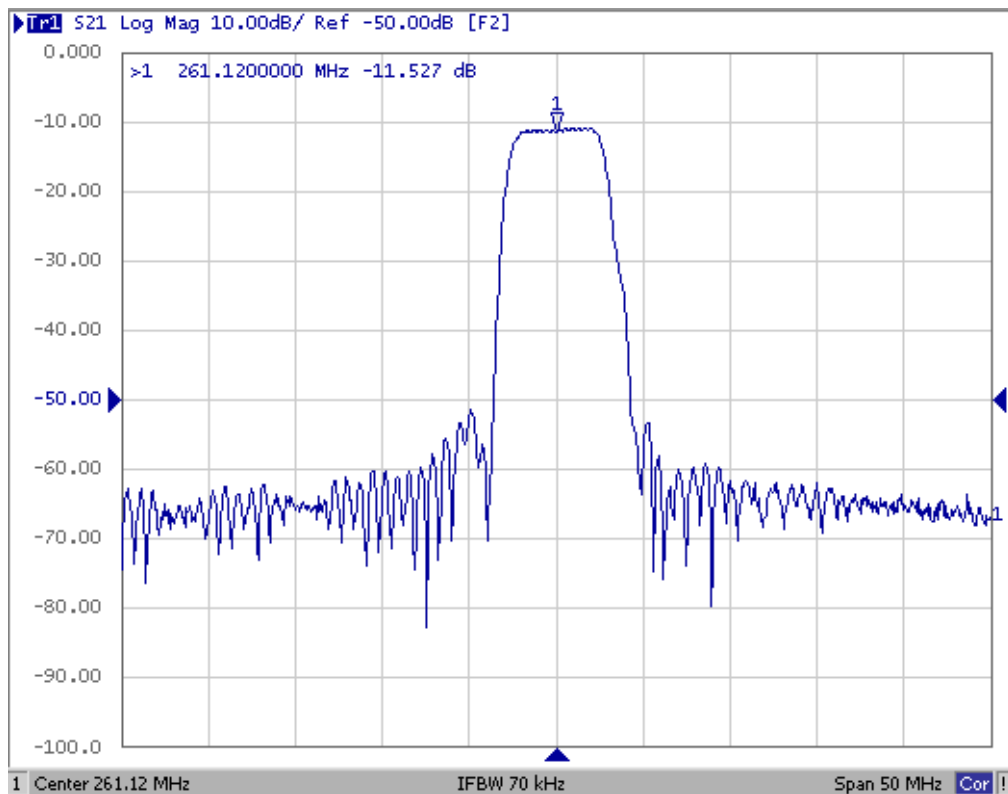


Fig1. Horizontal: 5MHz/Div Vertical: 10dB/Div

2. Group-Delay Ripple: (span : 10MHz)

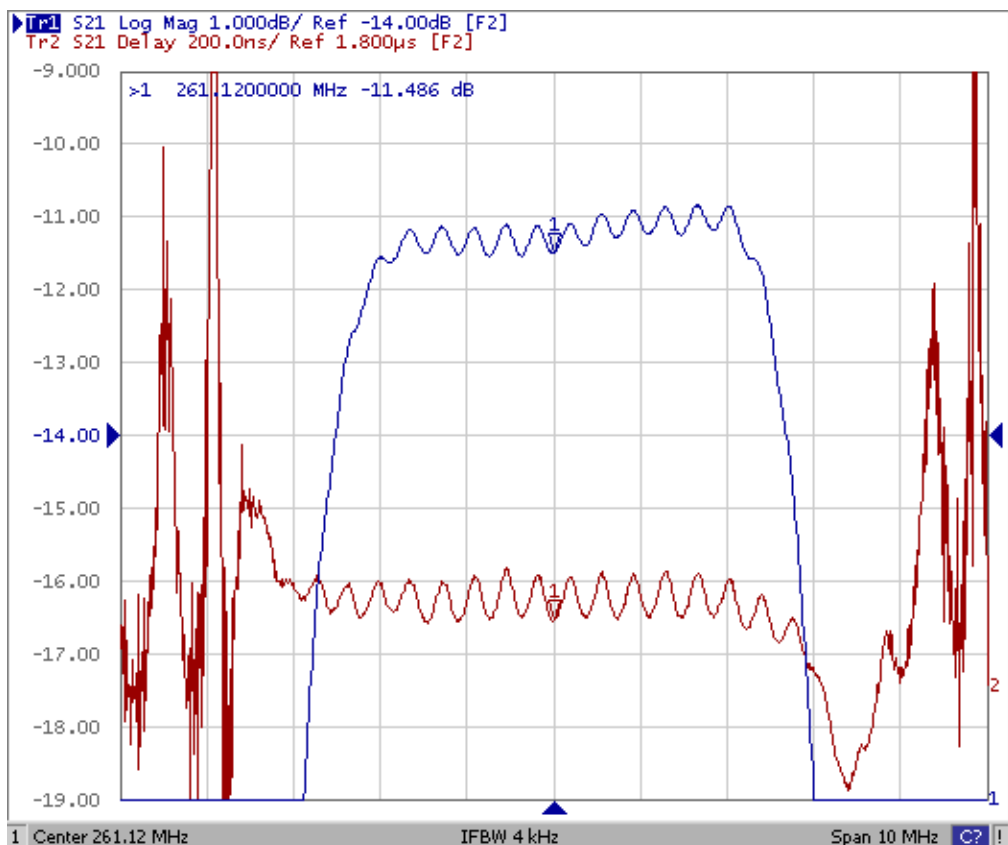
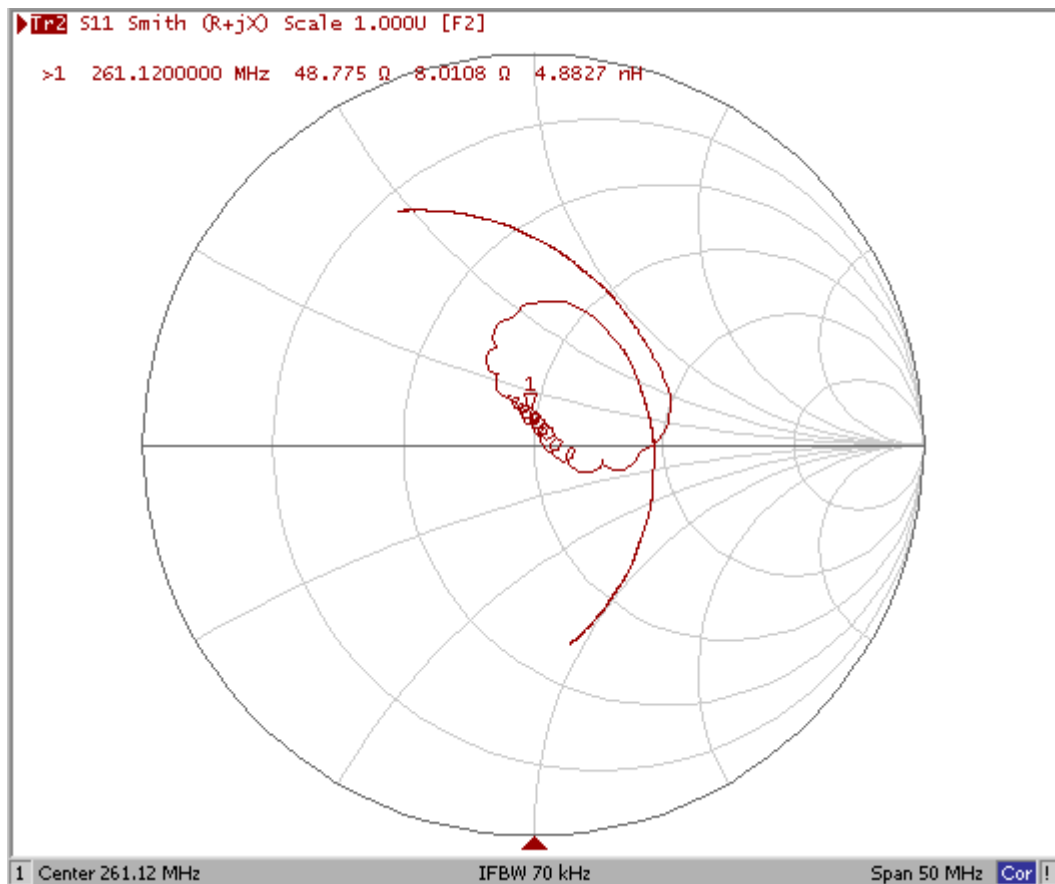
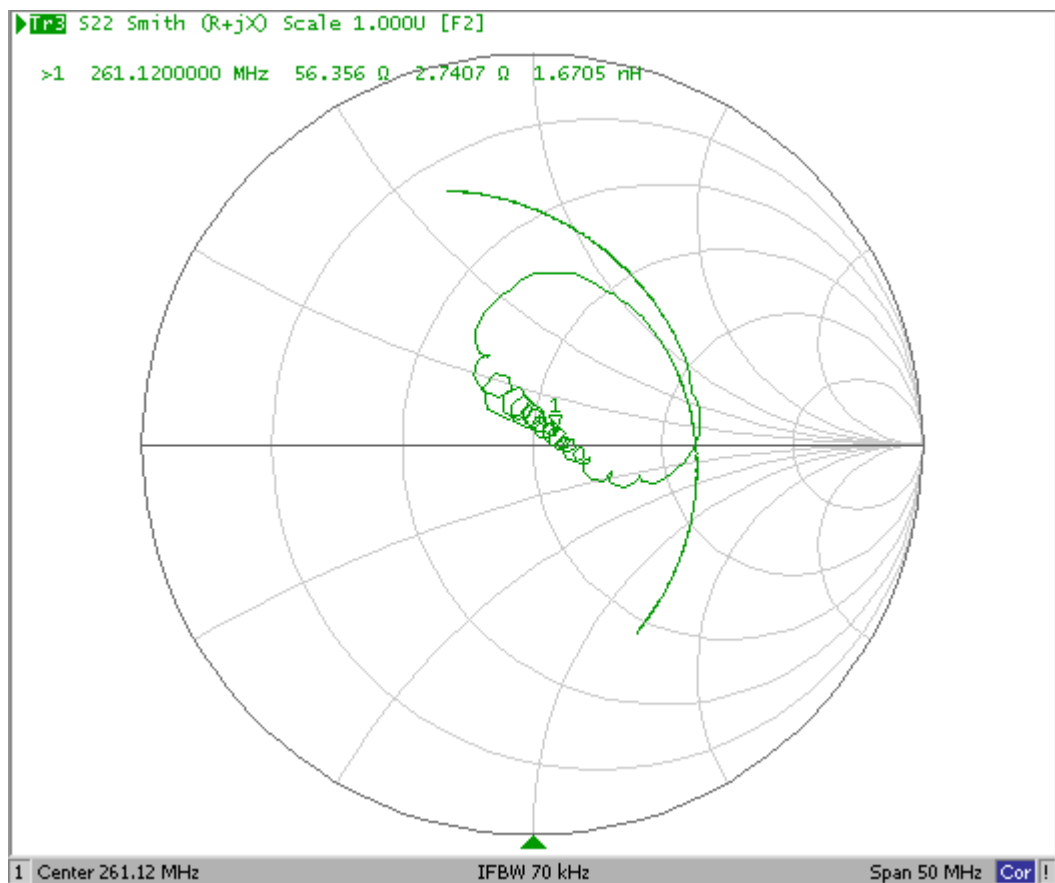


Fig2. Horizontal: 1.0MHz/Div Vertical: 200nec/Div

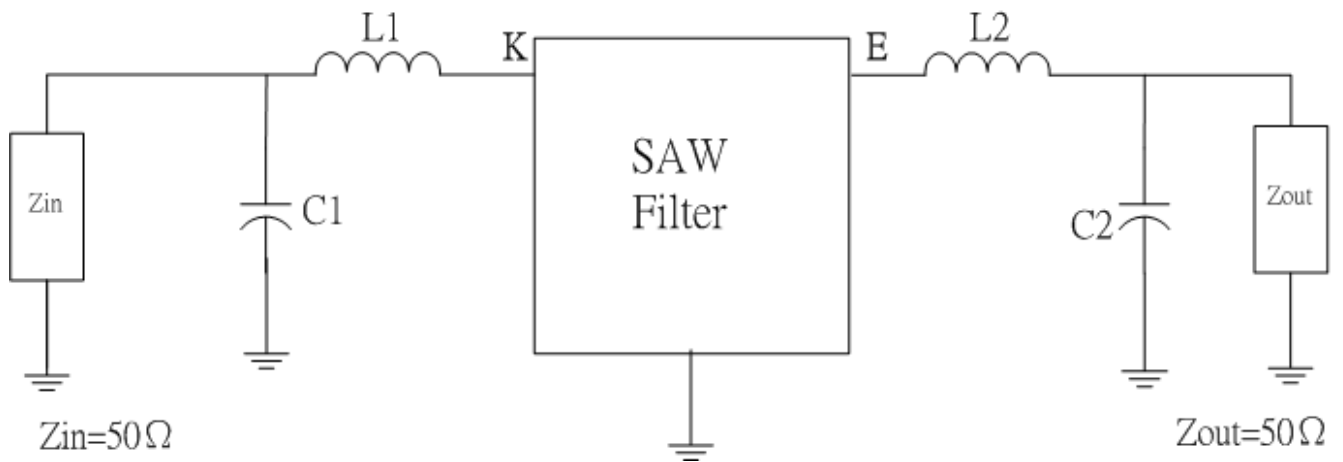
3. S11 Smith Chart: (span : 50MHz)



4. S22 Smith Chart (span : 50MHz)

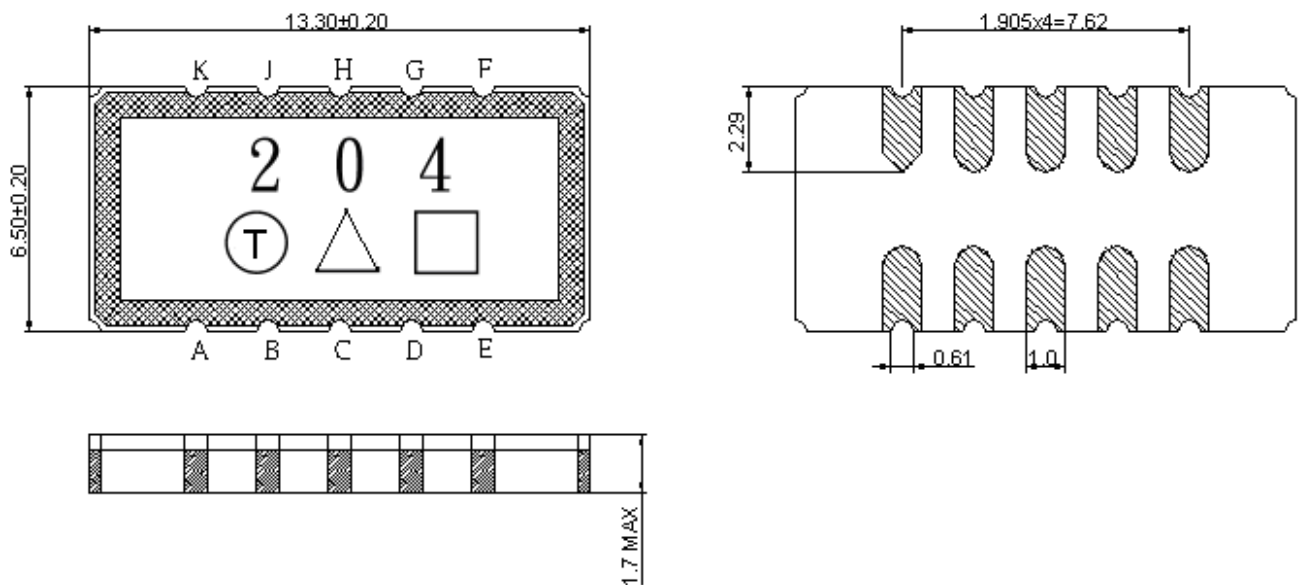


D. MATCHING CIRCUIT:



$$L=8.2\text{nH} \quad L2=9.4\text{nH} \quad C1=36\text{pF} \quad C2=31\text{pF}$$

E. OUTLINE DRAWING:



#K: Input

#A: Input Ground

#E: Output

#F: Output Ground

#B,C,D,G,H,J: Ground

□: Week Code

△: Product / Year Code

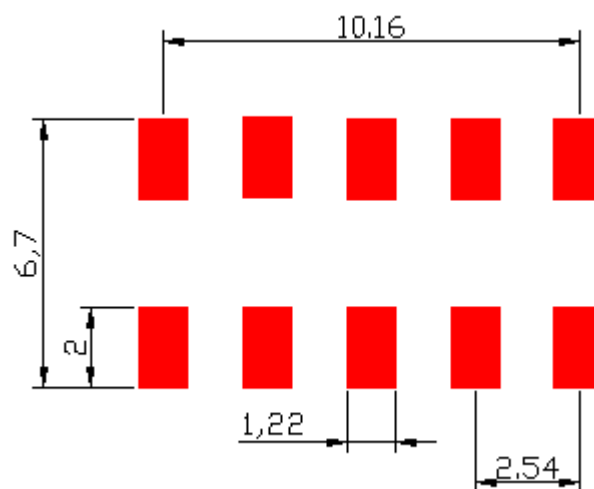
Product Code Table

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

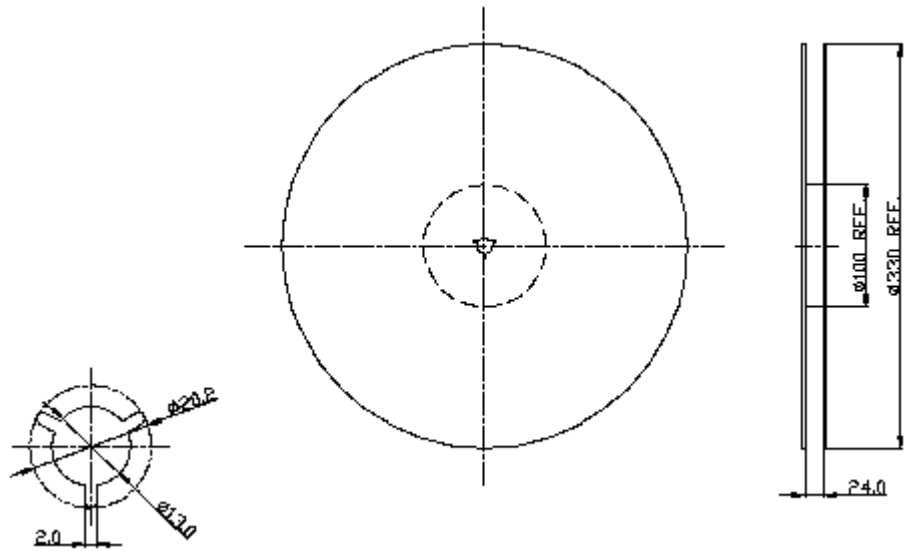
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

F. PCB FOOTPRINT:

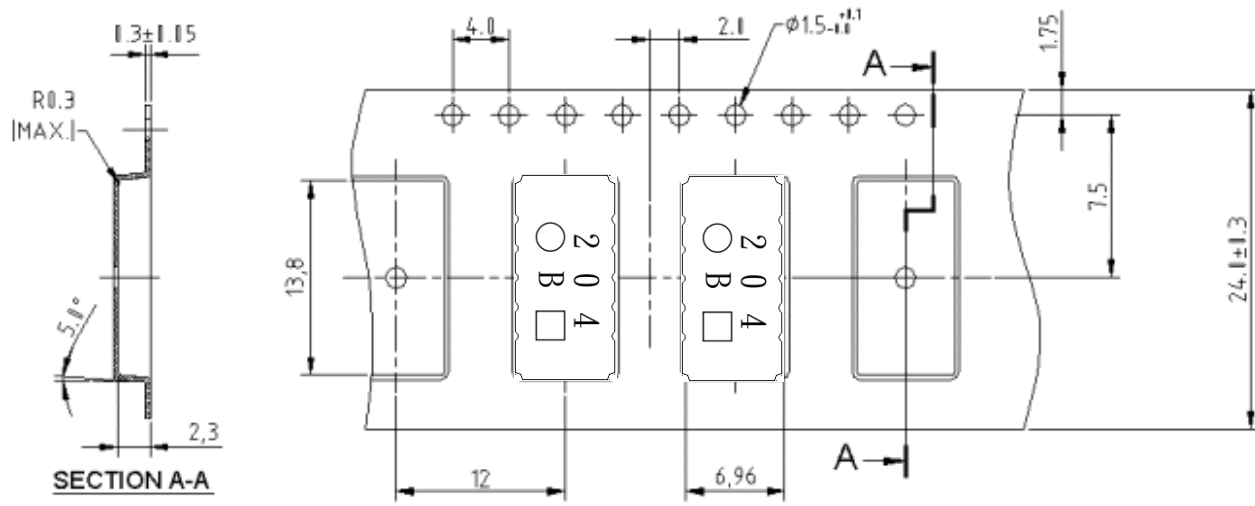


G. PACKING:

1. REEL DIMENSION (Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



Unit: mm

H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

