



TAI-SAW TECHNOLOGY CO., LTD.

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

Product Description: SAW Filter 1950 MHz (BW 60MHz) SMD 1.1X0.9 mm

TST Part No.: TA2305A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2021/07/02

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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SAW Filter 1950MHz (BW 60Hz) SMD 1.1x0.9mm

MODEL NO.:TA2305A

REV. NO.:3.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 0V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 3(MSL3)
6. ESD 50V(MM) 100V(HBM)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

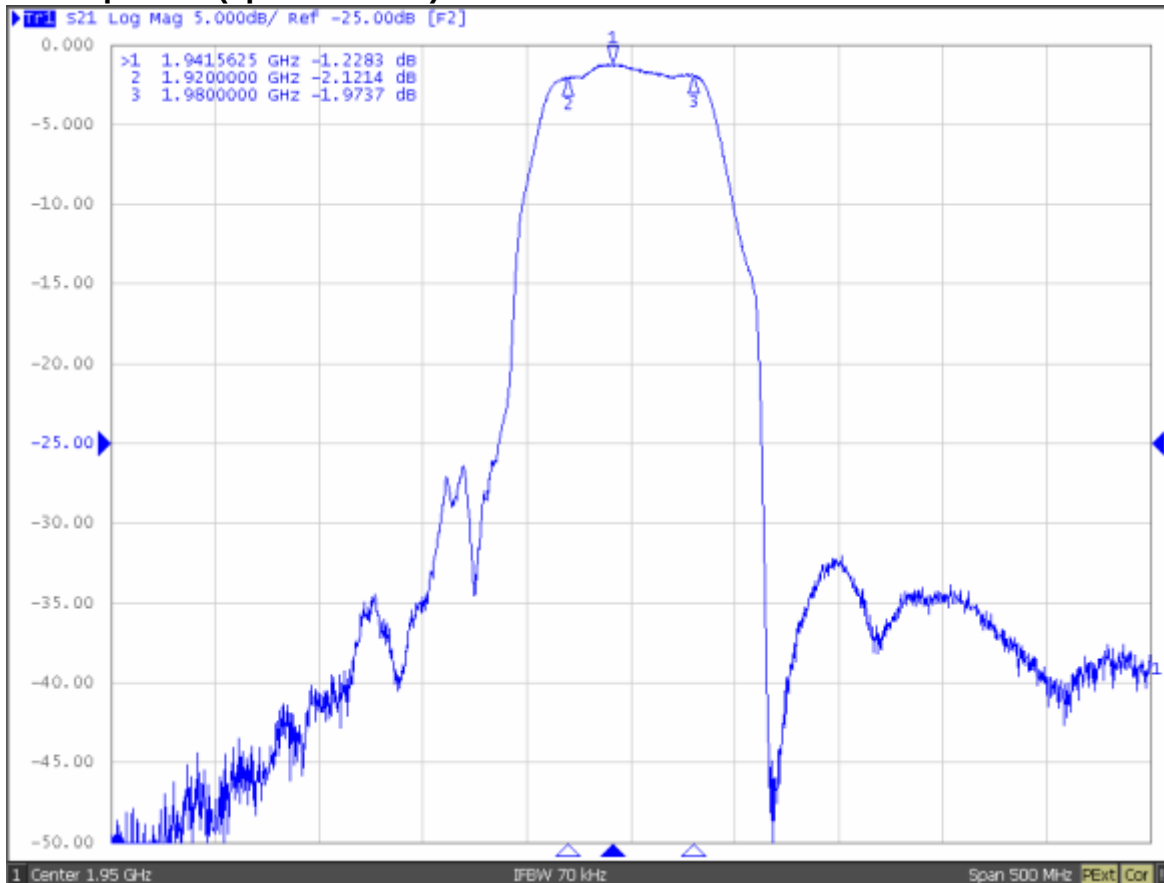
Terminating source impedance (single) : $Z_s = 50 \Omega$

Terminating load impedance(single) : $Z_L = 50 \Omega$

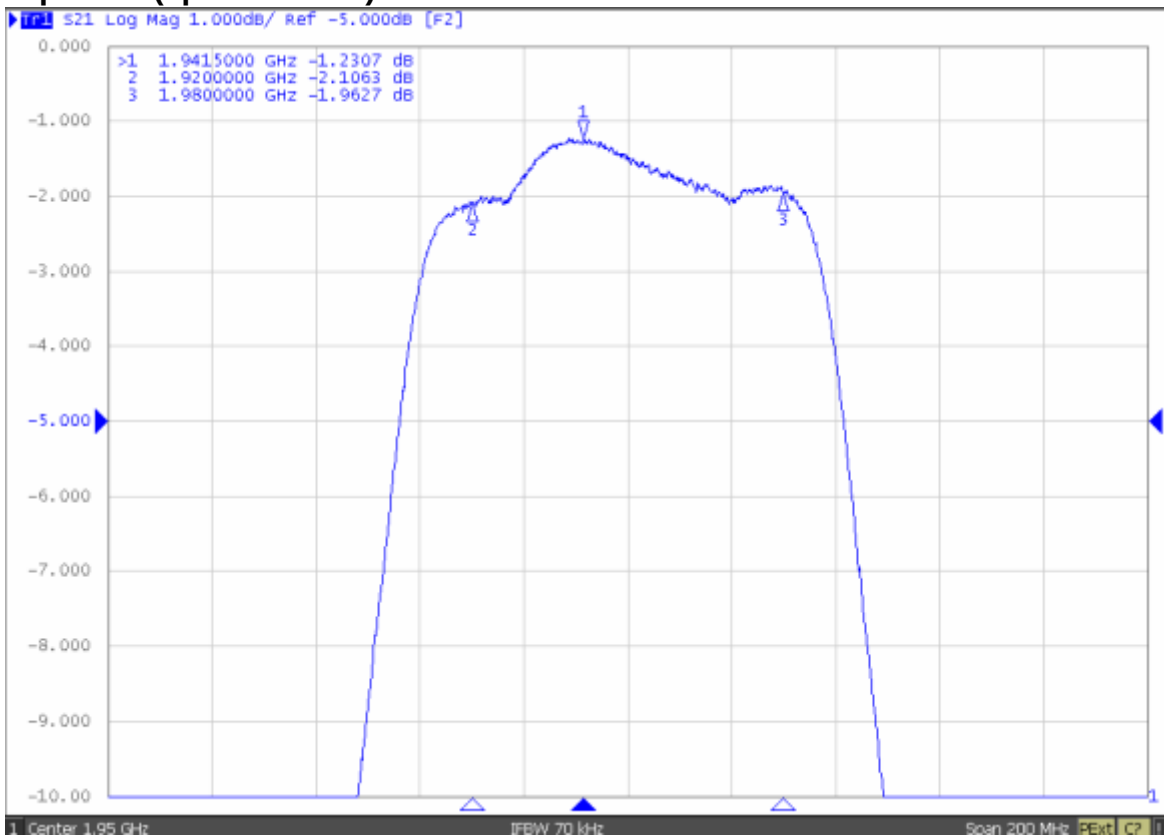
Item	Unit	min	Type.	max
Center Frequency Fc	MHz	-	1950	-
Insertion Loss (1920~1980 MHz) IL	dB		1.6	2.5
VSWR (1920~1980 MHz)			1.9	2.3
Amplitude ripple (1920~1980 MHz)	ns		0.6	1.5
Attenuation				
DC ~ 1577 MHz	dB	32	38	
1577 ~ 1880 MHz	dB	22	29	
2110 ~ 2170 MHz	dB	30	35	
2500 ~ 3120 MHz	dB	28	34	
3840 ~ 3960 MHz	dB	25	29	
5760 ~ 5940 MHz	dB	15	21	
Package size	mm	1109		

C. Frequency Characteristics:

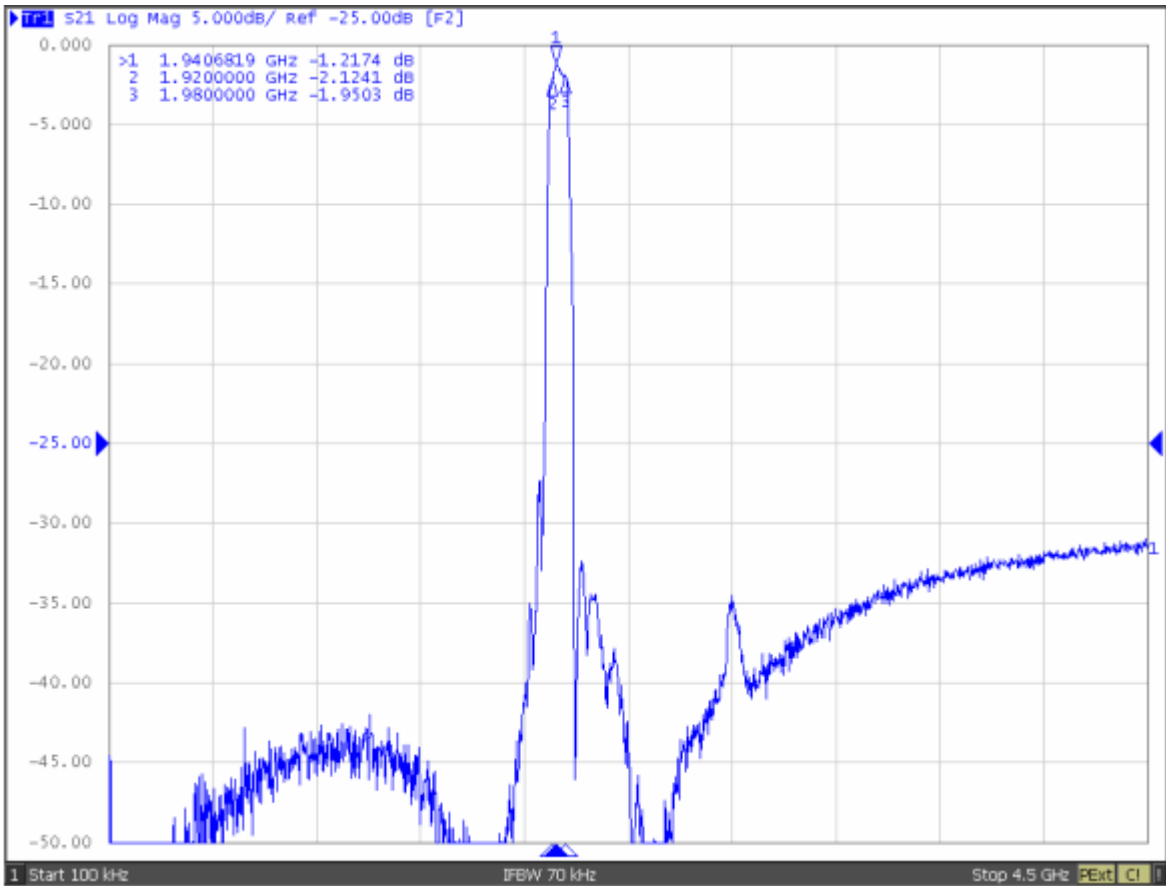
S21 response: (span 500MHz)



S21 response: (span 200MHz)



S21 response: (span 4.5GHz)

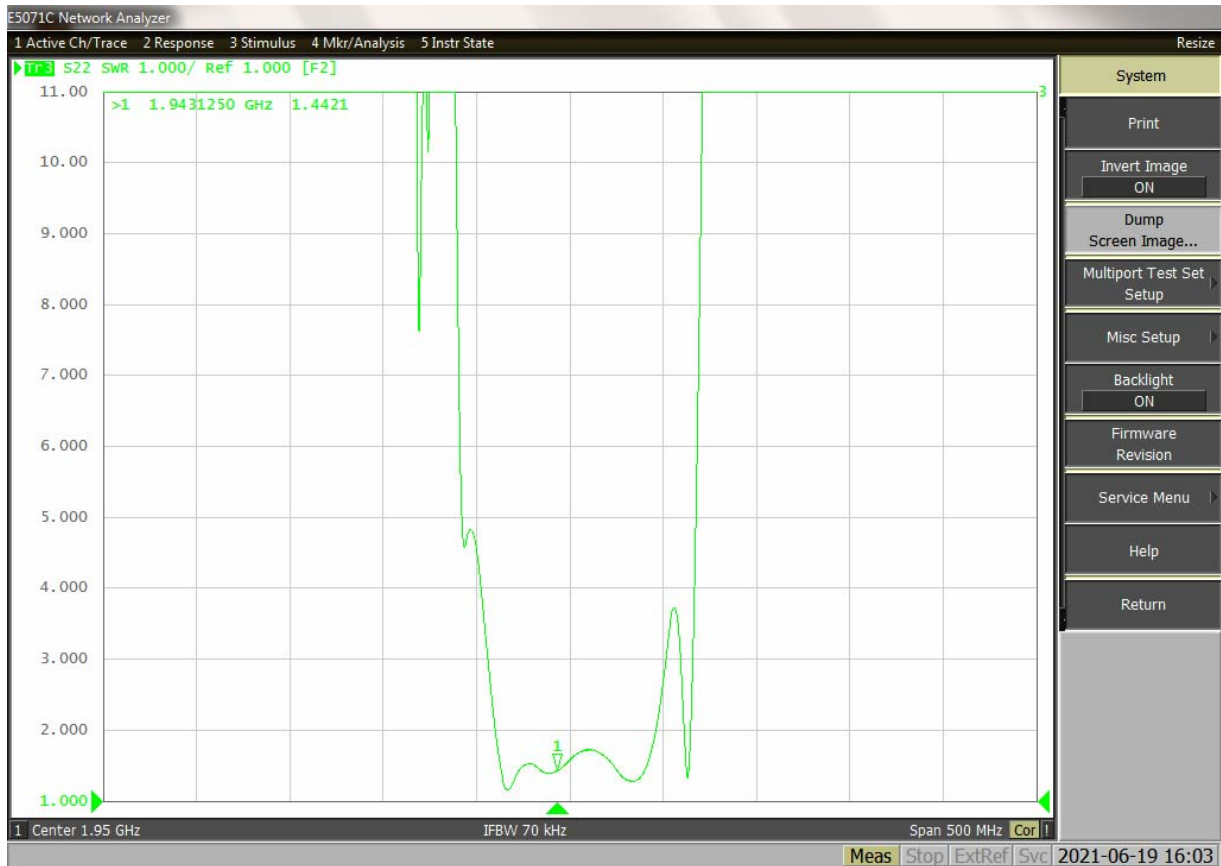


Reflection Functions :

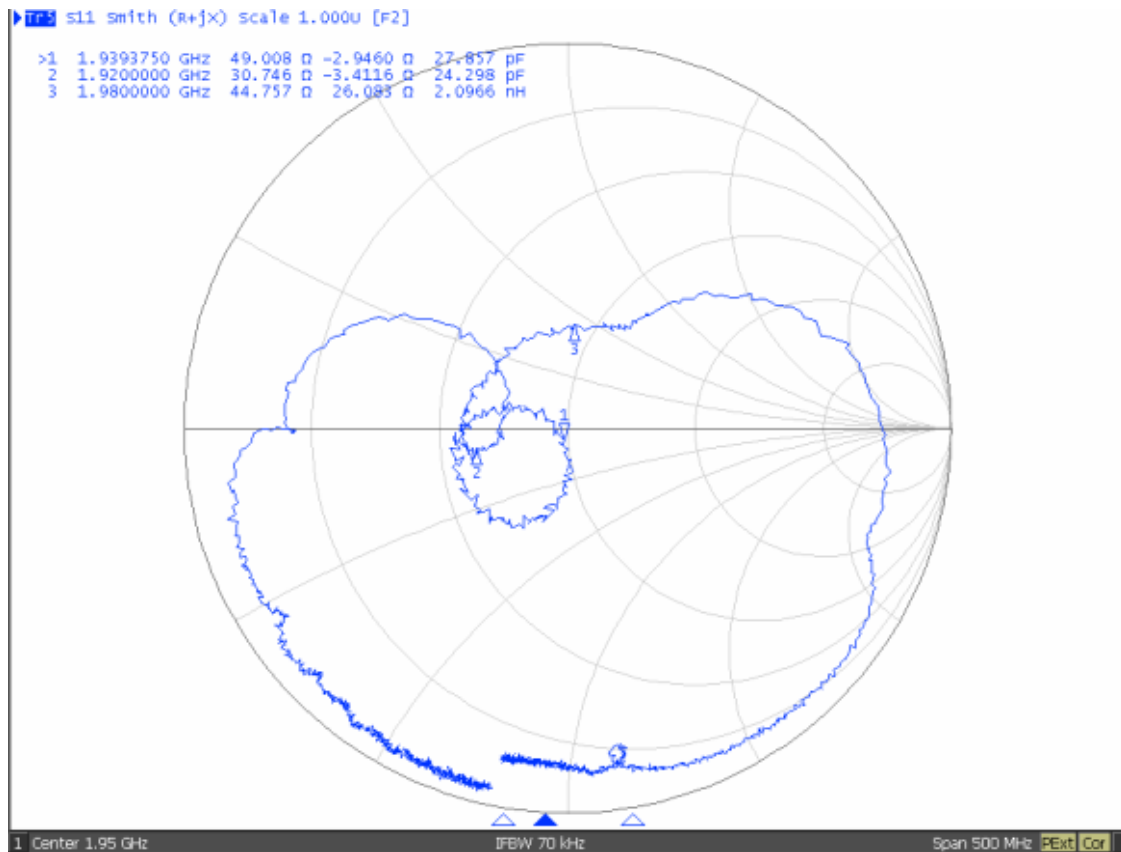
VSWR S11



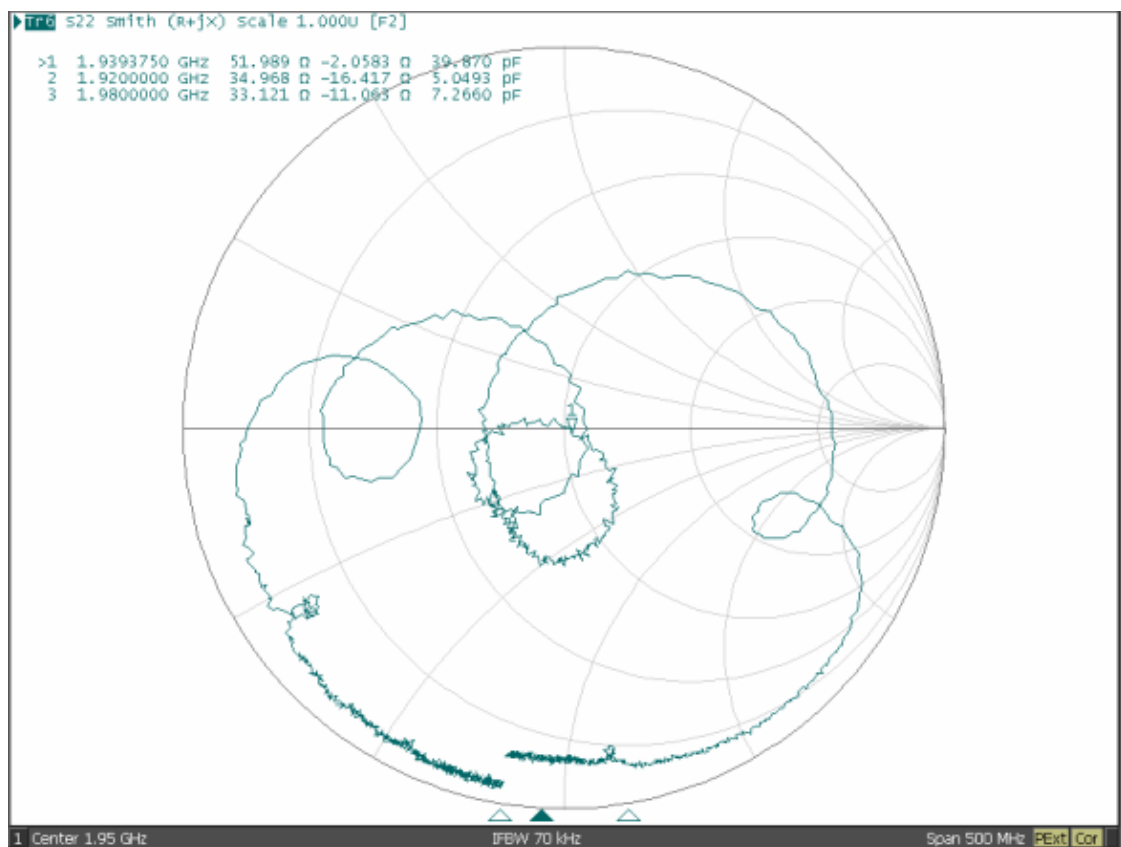
VSWR S22



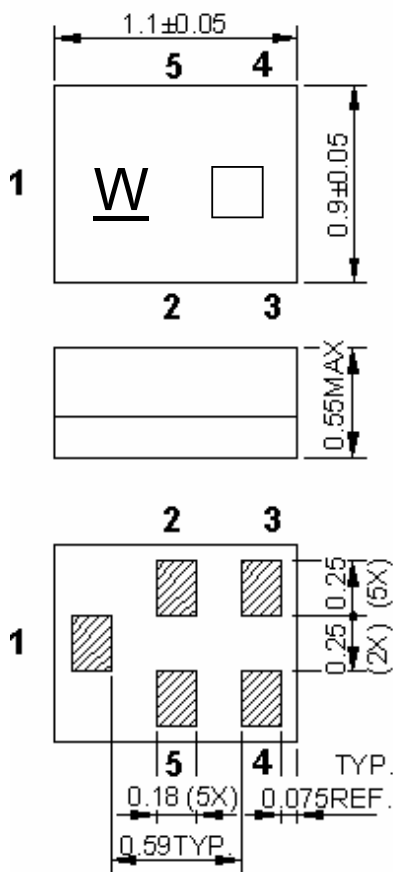
Smith Chart S11 (span 500MHz)



Smith Chart S11 (span 500MHz)



D. OUTLINE DRAWING:



All tolerances are ± 0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.

1 to 5 : Pin No.

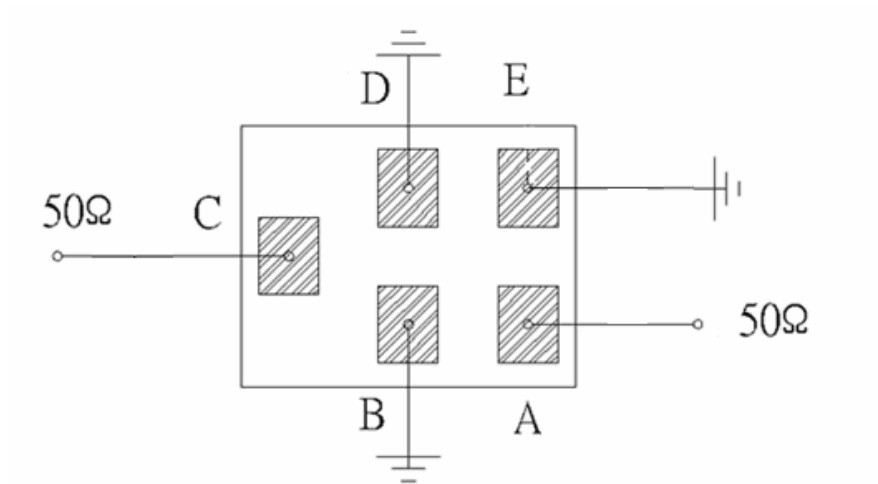
Unit : mm

Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

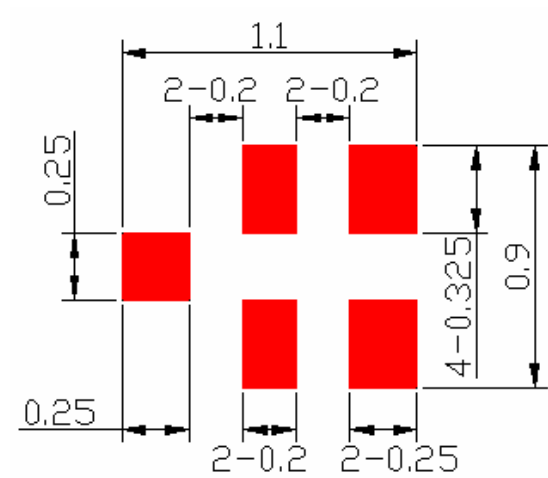
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013 / 2021	A	B	C	D	E	F	G	H	J	K	L	M
2014 / 2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2016 / 2024	n	p	q	r	s	t	u	v	w	x	y	z
2017 / 2025	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018 / 2026	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019 / 2027	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>i</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020 / 2028	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

E. MEASUREMENT CIRCUIT:



F. PCB Footprint :



 : Land Pattern
Unit: mm

(Please refer to FR-75D10 for packing quantity)



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.

