TAI-SAW TECHNOLOGY CO., LTD.
No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Name: SAW Rx Filter 788 MHz LTE Band 28 SMD 1.1x0.9 mm (BW=30 MHz)

TST Parts No.: TA1898C Customer Part No.:_____

Customer signature required

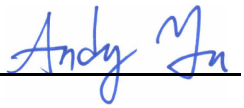
Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Anne Chen 

Approved by:_____ Andy Yu 

Date:_____ 01 . 02 .2020 _____

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

TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.
TEL: 886-3-4690038 FAX: 886-3-4697532
E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

SAW Filter 788 MHz

MODEL NO.:TA1898C REV. NO.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 15 dBm
2. DC Voltage : 0 V
3. Operating Temperature: -40 ℃ to +85 ℃
4. Storage Temperature: -40 ℃ to +85 ℃
5. Moisture Sensitive Level: Level 1 (MSL3)
6. ESD: 100 V(MM), 200 V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic **S**ensitive **D**evice (**ESD**)

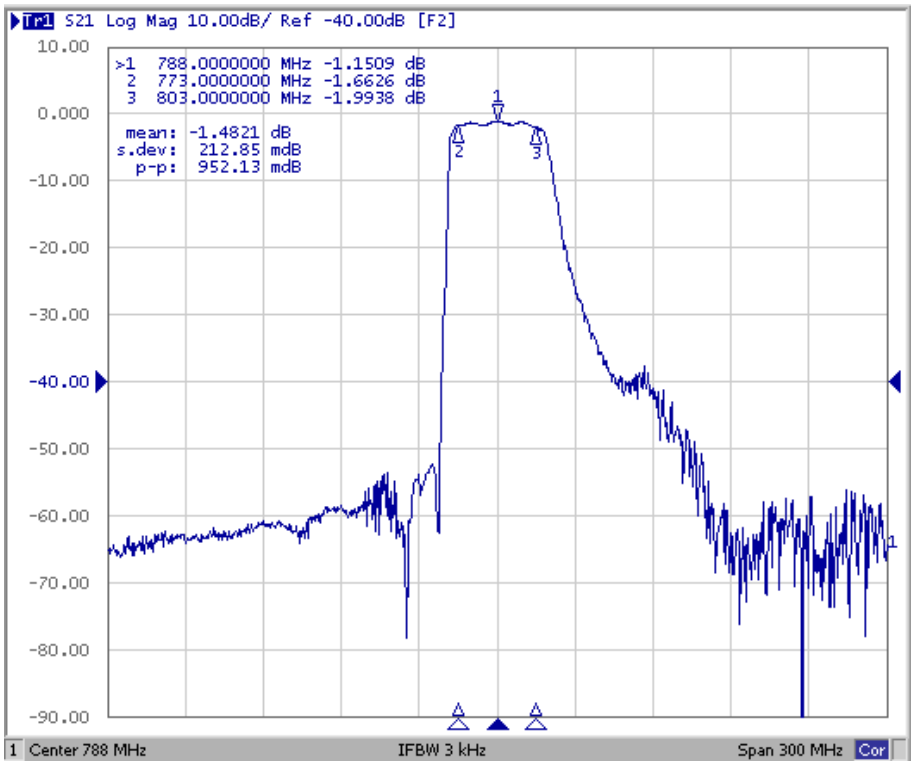
B. ELECTRICAL CHARACTERISTICS:

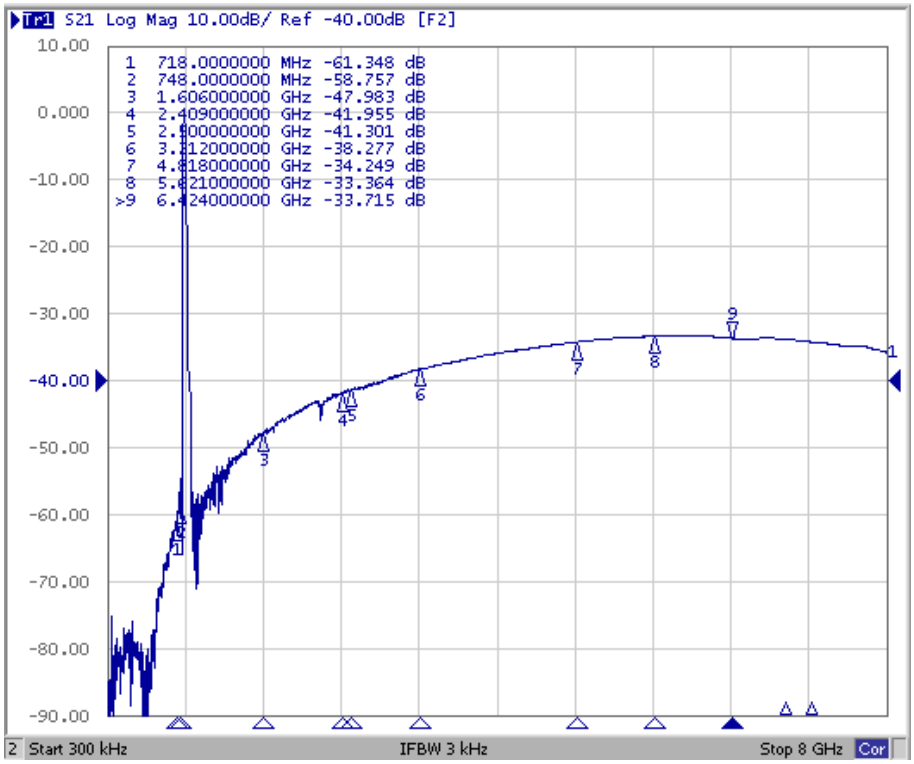
Terminating source impedance: Zs = 50 Ω

Terminating load impedance: Z_L = 50 Ω

Item		Unit	Min.	Typ.	Max.
Center Frequency	**Fc**	MHz	-	788	-
Insertion Loss (773~803 MHz)	**IL**	dB	-	2.0	3.6
Amplitude Ripple (773~803 MHz)		dBp-p	-	1.0	2.6
VSWR (773~803 MHz)		-	-	2.2	2.8
Attenuation (Reference level from 0 dB)					
703 ~ 718 MHz		dB	46	60	-
718 ~ 748 MHz		dB	46	52	-
1546 ~ 1606 MHz		dB	40	49	-
1559 ~ 1606 MHz		dB	40	49	-
2319 ~ 2409 MHz		dB	35	43	-
2400 ~ 2500 MHz		dB	35	43	-
3092 ~ 3212 MHz		dB	30	41	-
3865 ~ 4015 MHz		dB	30	39	-
4638 ~ 4818 MHz		dB	30	38	-
4900 ~ 5950 MHz		dB	30	38	-
5411 ~ 5621 MHz		dB	30	38	-
6184 ~ 6424 MHz		dB	30	39	-
6957 ~ 7227 MHz		dB	30	38	-

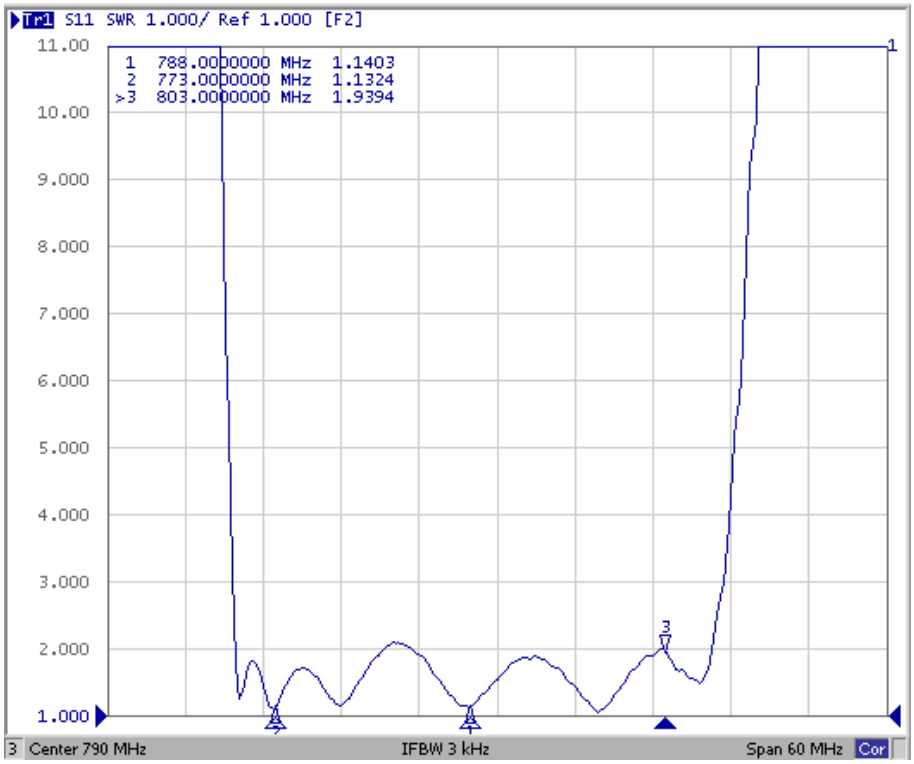
C. FREQUENCY CHARACTERISTICS:

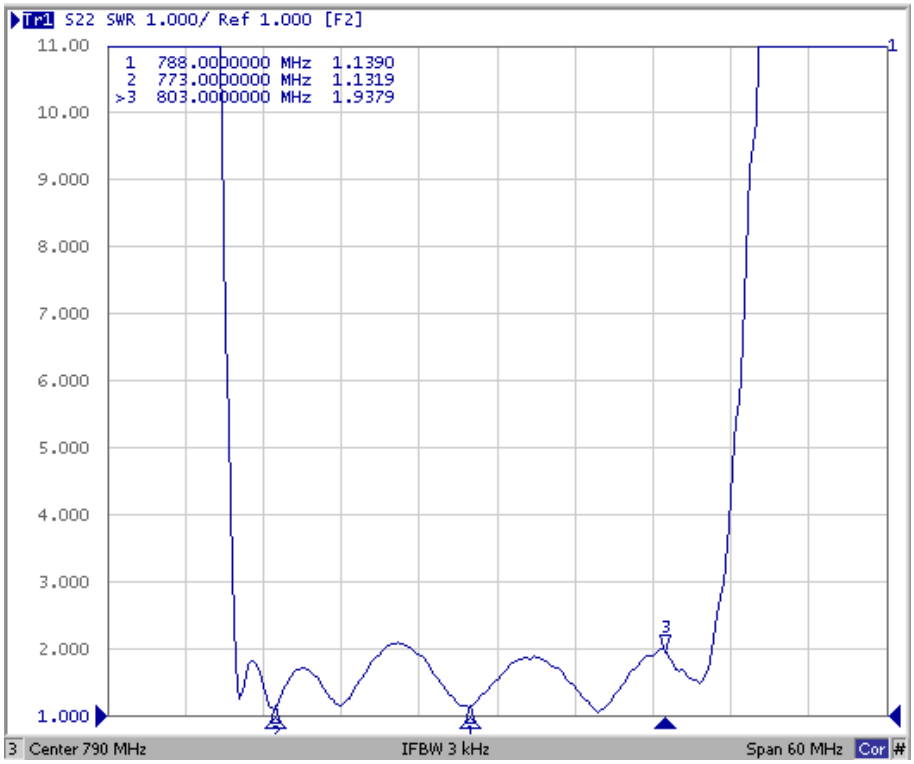




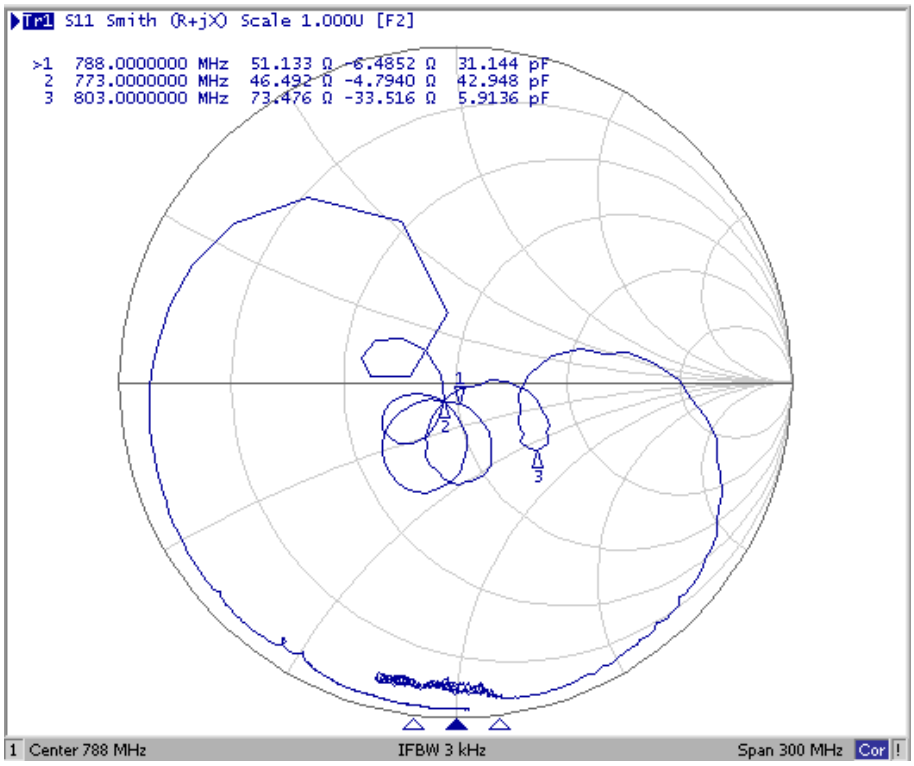
Reflection Functions:

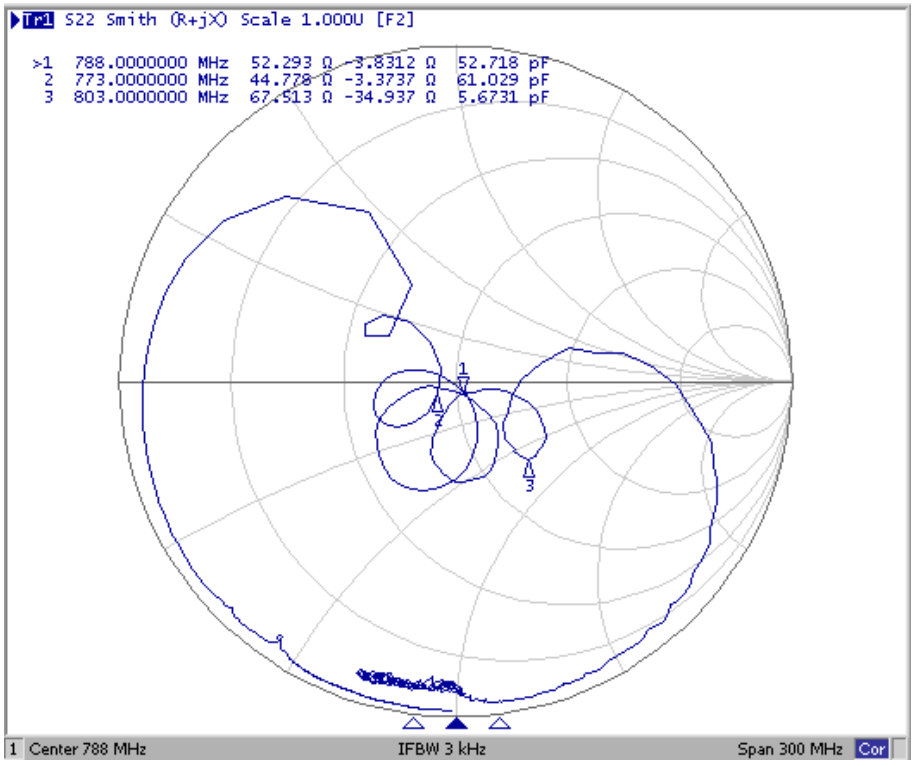
VSWR



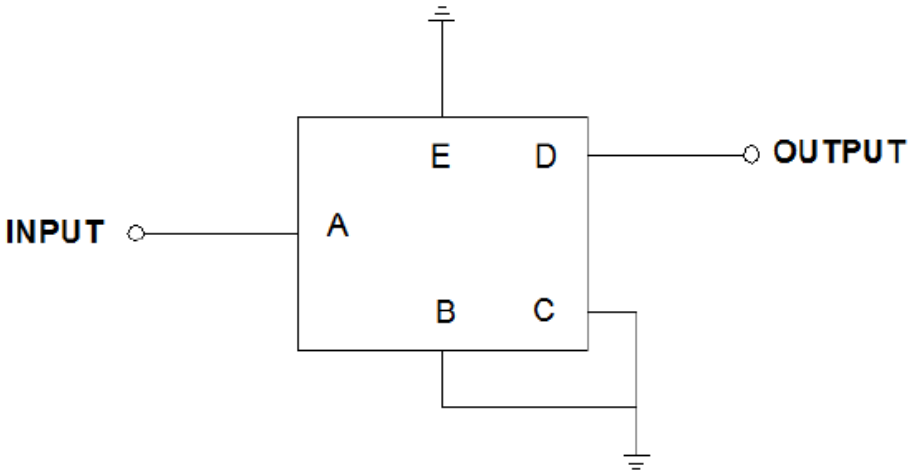


Smith Chart


Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
>1 788.0000000 MHz 51.133 Ω -6.4852 Ω 31.144 pF
2 773.0000000 MHz 46.492 Ω -4.7940 Ω 42.948 pF
3 803.0000000 MHz 73.476 Ω -33.516 Ω 5.9136 pF
1 Center 788 MHz
IFBW 3 kHz
Span 300 MHz
Cor

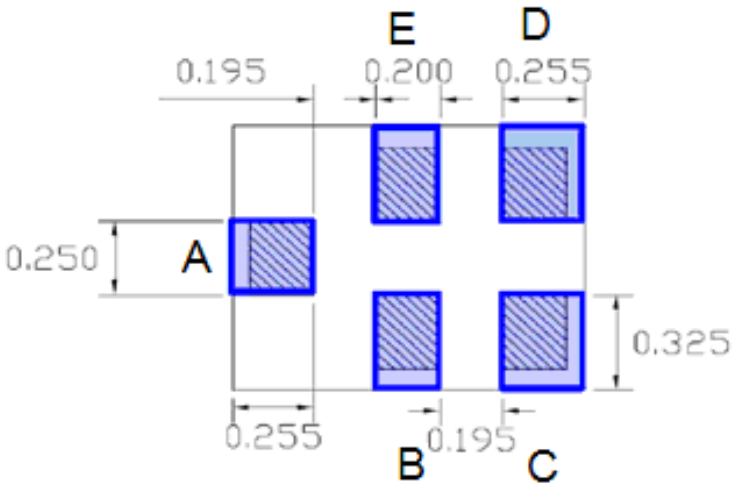

Tr1 S22 Smith (R+jX) Scale 1.000U [F2]
>1 788.0000000 MHz 52.293 Ω -3.8312 Ω 52.718 pF
2 773.0000000 MHz 44.778 Ω -3.3737 Ω 61.029 pF
3 803.0000000 MHz 67.513 Ω -34.937 Ω 5.6731 pF
1 Center 788 MHz
IFBW 3 kHz
Span 300 MHz
Cor

D. MEASUREMENT CIRCUIT:



Source & Load Impedance: 50 Ω

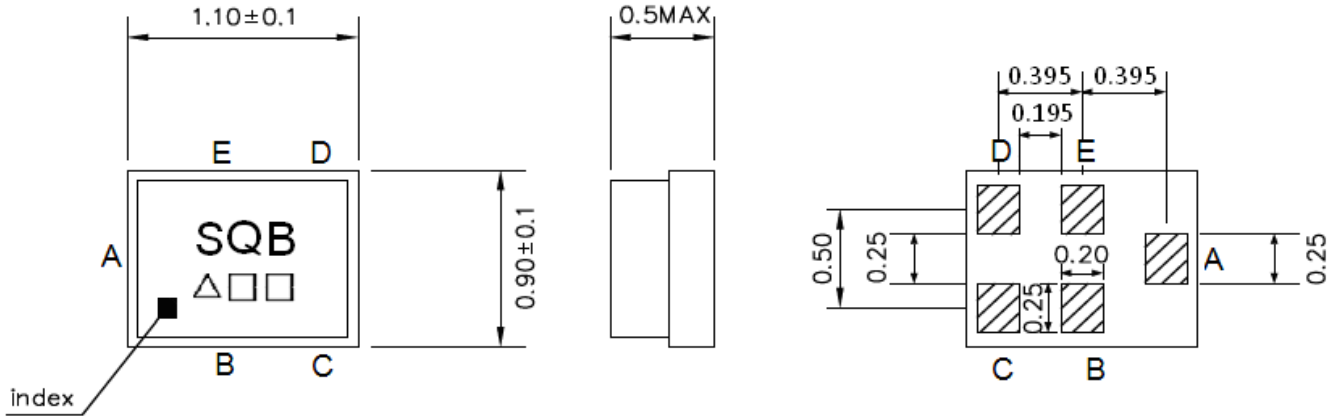
E. PCB Footprint:



(TOP VIEW)

F. OUTLINE DRAWING:

Device size: 1.1typ. x 0.9typ. x 0.5max.



Unit : mm

Pin Configuration

Pin No.	Symbol	Function
A	IN	Unbalanced pin
B	GND	Ground
C	GND	Ground
D	OUT	Unbalanced pin
E	GND	Ground

Marking name : **SQB**

△: Date code

□ **:** Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

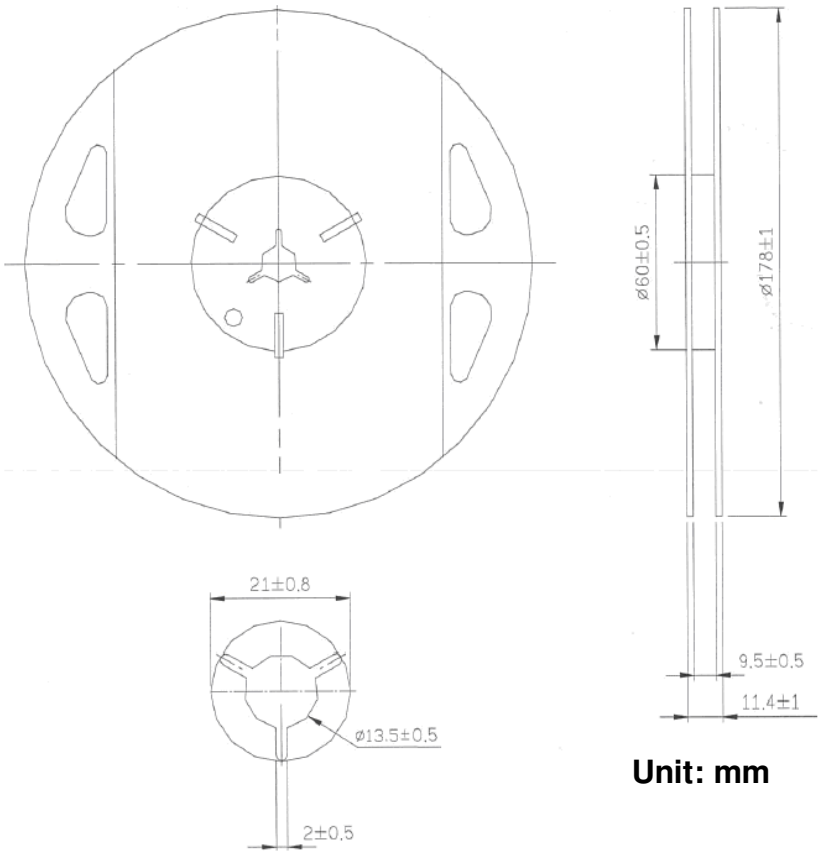
Date Code. Follow below table. (4-year cycle)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2020 / 2024	n	p	q	r	s	t	u	v	w	x	y	z
2021 / 2025	A	B	C	D	E	F	G	H	J	K	L	M
2022 / 2026	N	P	Q	R	S	T	U	V	W	X	Y	Z

G. PACKING:

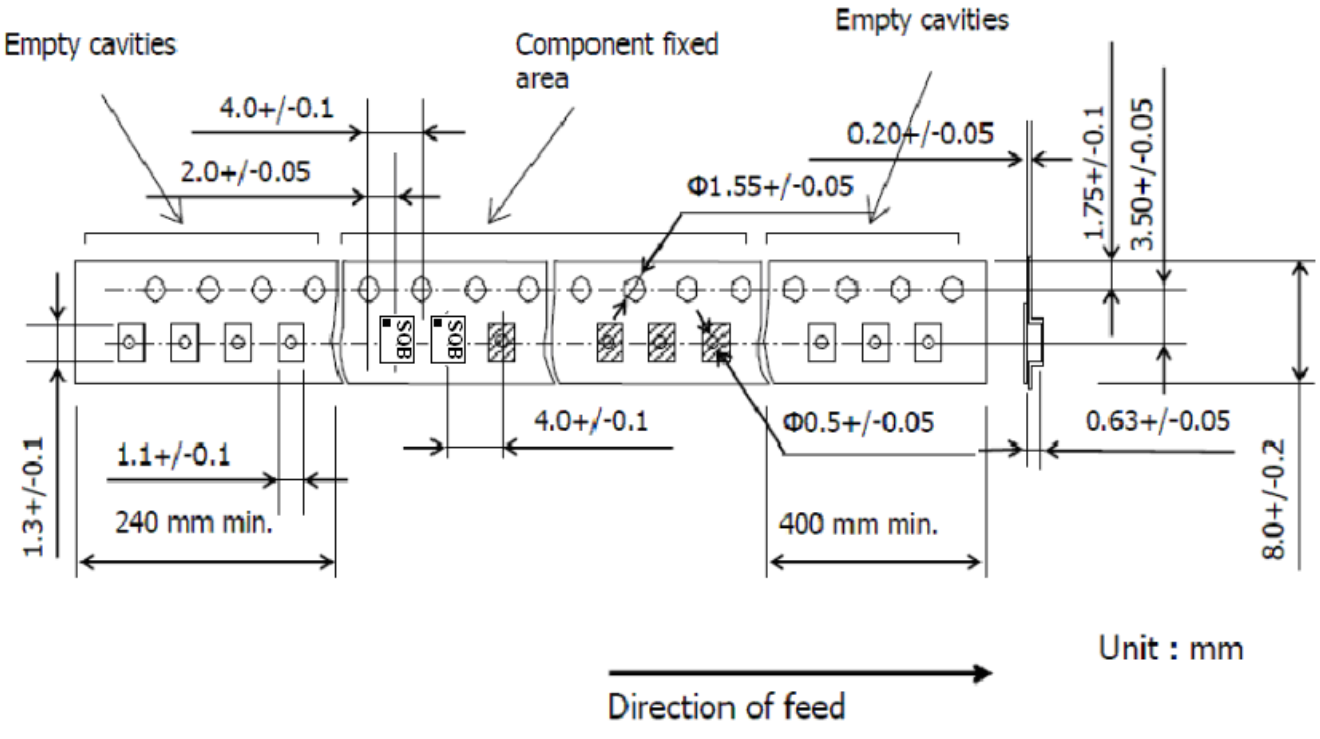
1. REEL DIMENSION

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



Unit: mm

2. TAPE DIMENSION



H. <u>Recommended Reflow Profile:</u>

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