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 Description: 562.5MHz 100MHzBW SMD 5.0mm x 5.0mm SAW IF Filter

TST Parts No.: TB1400AA5112

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Kazuma Lee Kazuma Lee

Approval by: Andy Yu Andy Yu

Date: 06 / 29 / 2021

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 562.5MHz 100MHz BW (SMD 5.0×5.0 mm)
MODEL NO.: TB1400AA5112 REV. NO.1

RoHS Compliant
Lead-free soldering

Electrostatic **S**ensitive **D**evice

A. MAXIMUM RATING:

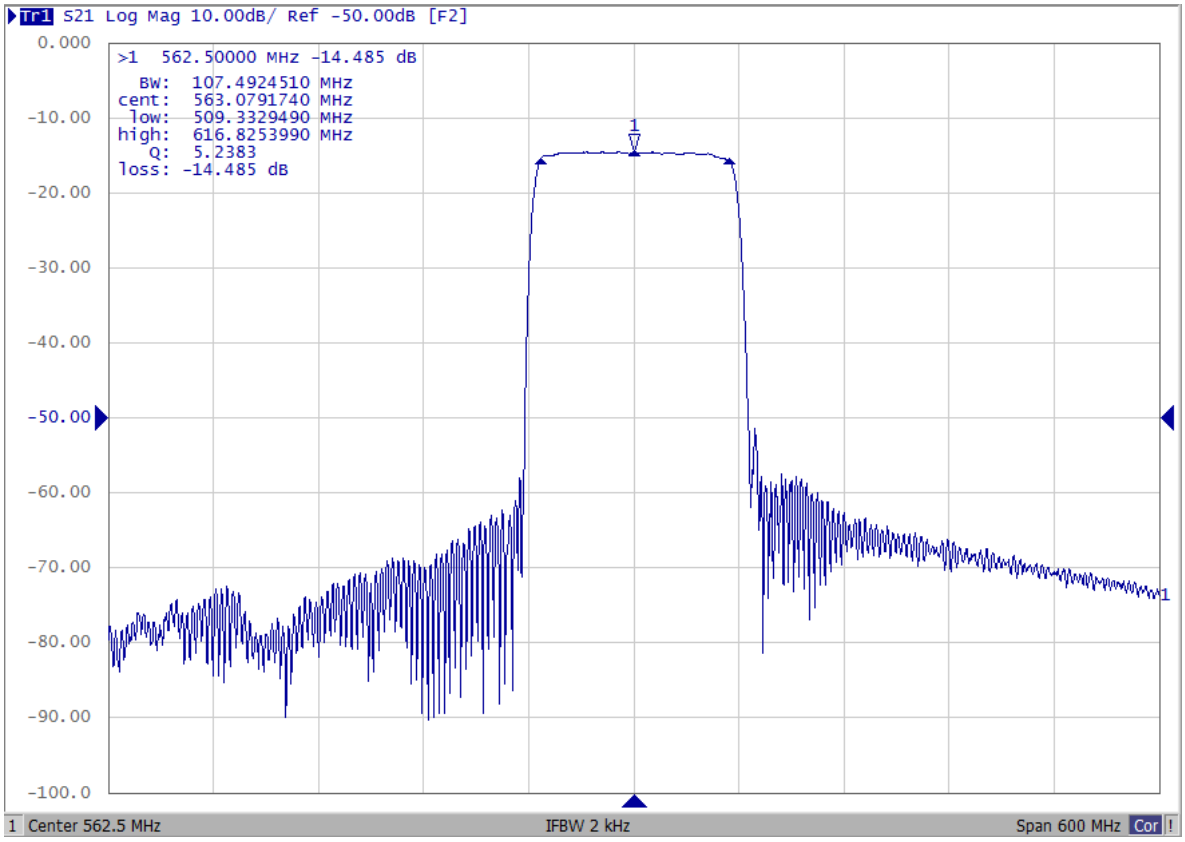
1. Operating temperature range: -40°C to 85°C
2. Storage temperature range: -55°C to 125°C
3. Continuous Input Power Level: 13 dBm
   Peak power level: 20 dBm min. with a 1% or less duty cycle
4. Maximum DC Voltage: 10V
5. IIP3, 2 tones and IM3 with in passband: 40dBm min.
6. Moisture Sensitivity Level: Level 1(MSL1)

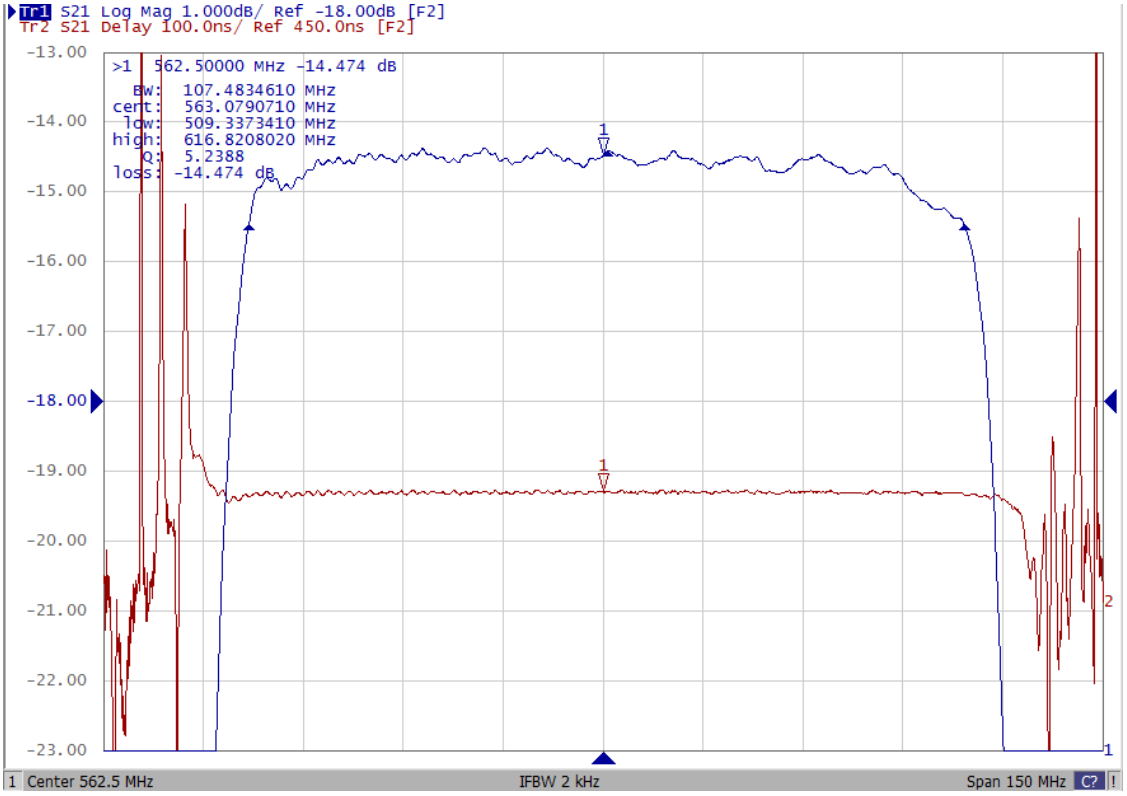
B. CHARACTERISTICS:

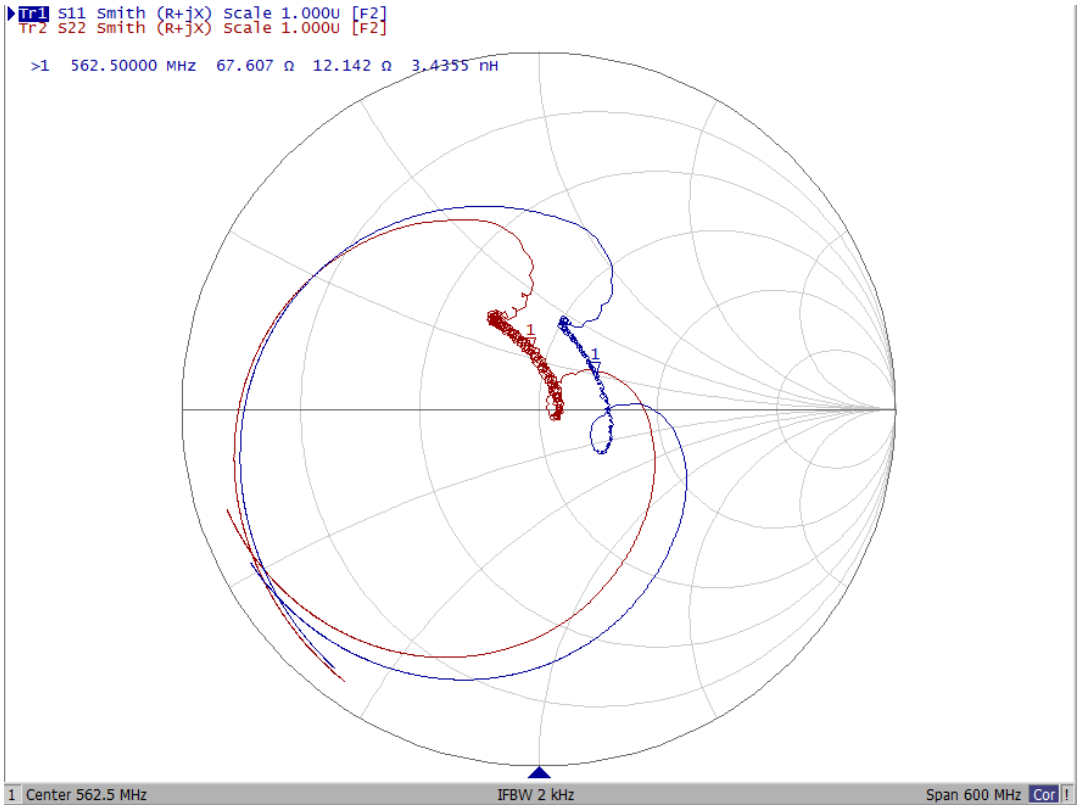
Temperature range for specification: T = 25 °C

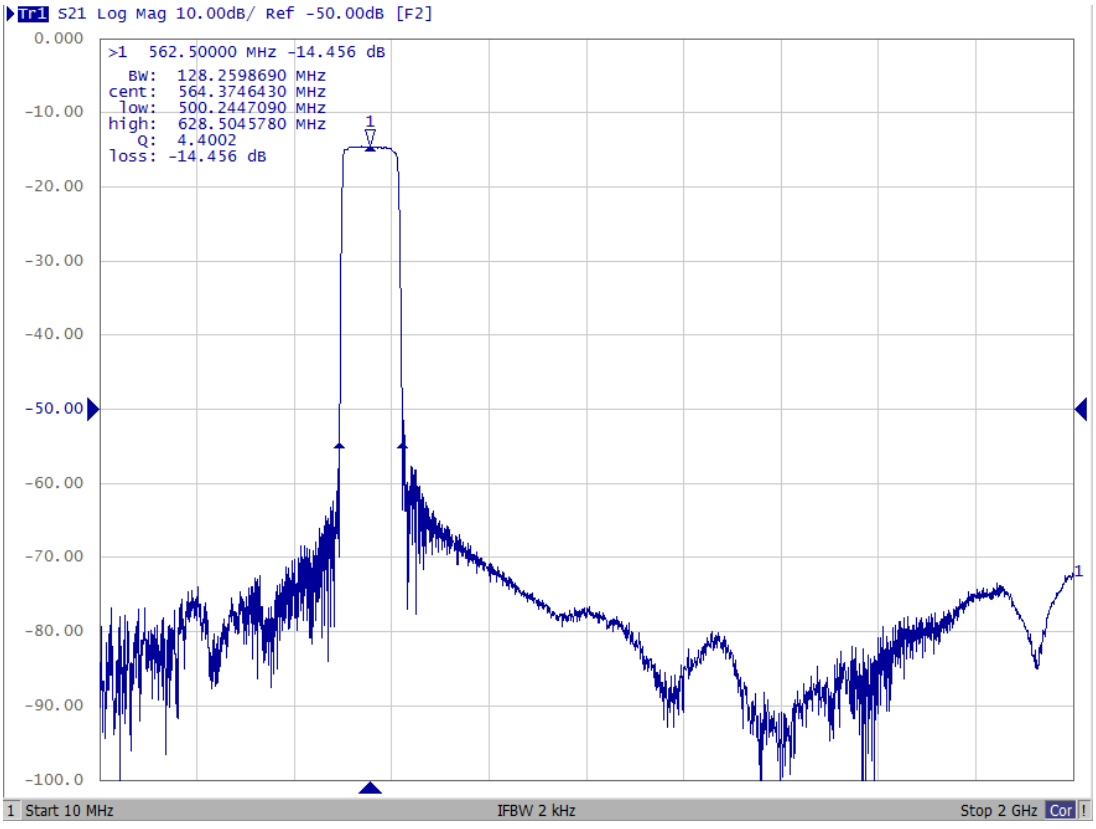
Item	Unit	Min.	Typ.	Max.
Center frequency, **Fc**	MHz	-	562.5	-
Insertion Loss, **IL**	dB	-	14.3	16.0
-1dB bandwidth	MHz	100	107	-
Passband Ripple Fc+/- 50MHz	dB	-	0.8	1.2
Absolute Group Delay	ns	-	320	500
Group Delay Ripple Fc+/- 50MHz	ns	-	15	100
Attenuation:(Reference level from typical IL)				
10 MHz ~ 487.5MHz	dB	40	48	-
637.5MHz ~ 2000MHz	dB	40	44	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. FREQUENCY CHARACTERISTICS:

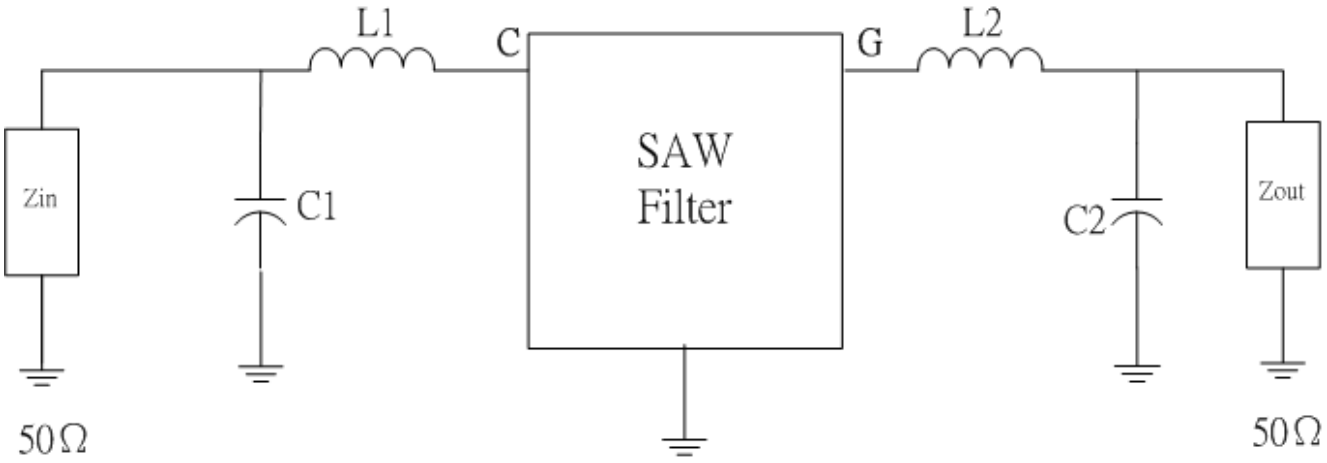





Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
Tr2 S22 Smith (R+jX) Scale 1.000U [F2]
>1 562.50000 MHz 67.607 Ω 12.142 Ω 3.4355 nH
1 Center 562.5 MHz
IFBW 2 kHz
Span 600 MHz
Cor

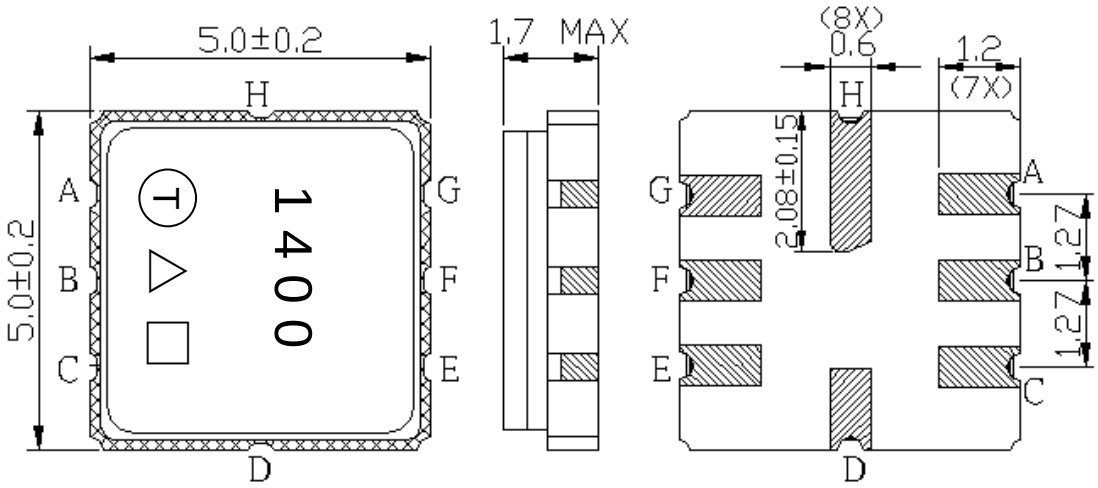

Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]
>1 562.50000 MHz -14.456 dB
BW: 128.2598690 MHz
cent: 564.3746430 MHz
low: 500.2447090 MHz
high: 628.5045780 MHz
Q: 4.4002
loss: -14.456 dB
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
1 Start 10 MHz
IFBW 2 kHz
Stop 2 GHz
Cor

D. MATCHING CIRCUIT:



L1=10nH L2=10nH C1=6pF C2=6.8pF

E. OUTLINE DRAWING:



#C: Input
#B: Input Ground
#G: Output
#F: Output Ground
#A, D, E, H: Ground
□: Week Code
△: Product / Year Code
Unit: mm

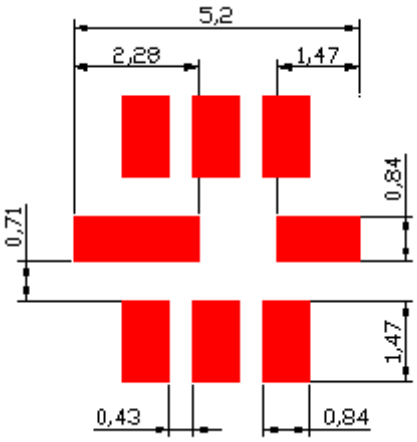
Product / Year Code

Year	2021 2025	2022 2026	2023 2027	2024 2028
Product Code	B	b	B	b

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

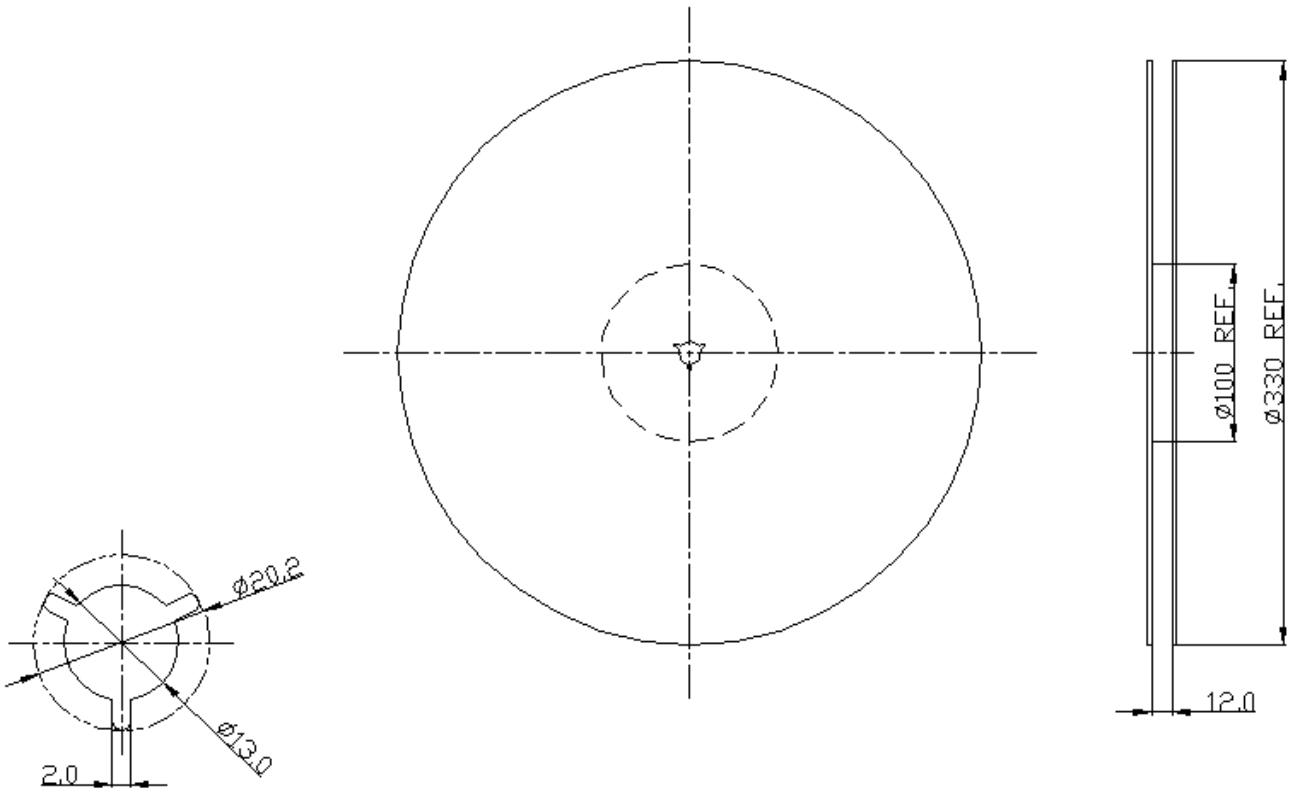
F. PCB FOOTPRINT:



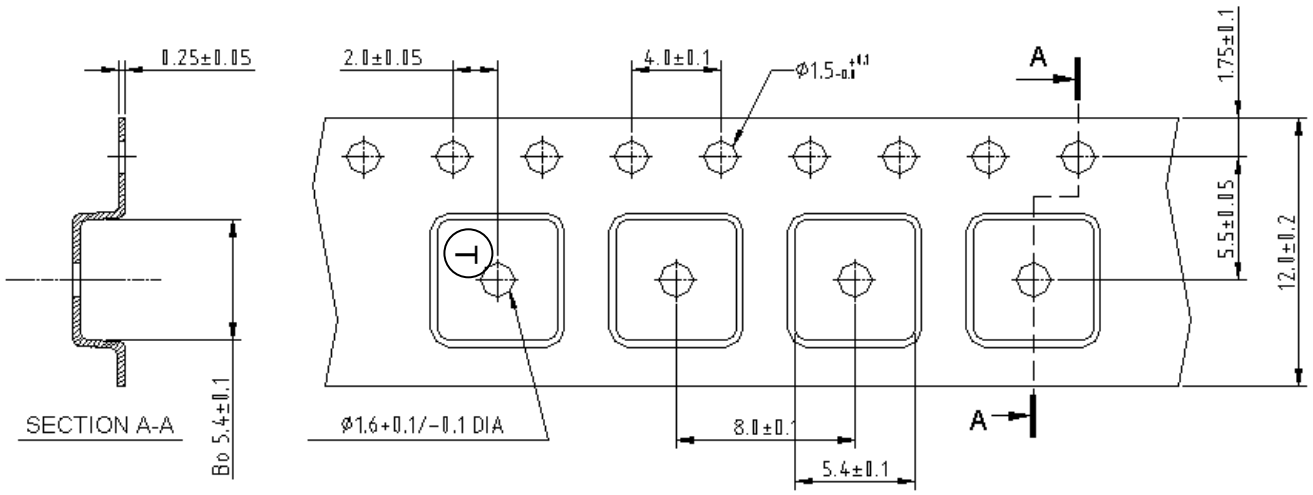
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. Recommended Reflow Profile:

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.