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 881.5MHz LTE Band 5 SMD 1109

TST Parts No.: TA1811D

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Sam Lin

Approved by: Bob Chau

Date: 2017/04/26

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 change

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SAW Rx Filter 881.5MHz LTE Band 5 SMD 1109 (25MHz BW)

MODEL NO.: TA1811D REV. No.: 2.0

A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm
2. DC voltage: 0 V
3. Operating Temperature: -30℃ to +85℃
4. Storage Temperature: -40℃ to +85℃
5. Moisture Sensitivity Level: Level 3
6. ESD 100V(MM) 200V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

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

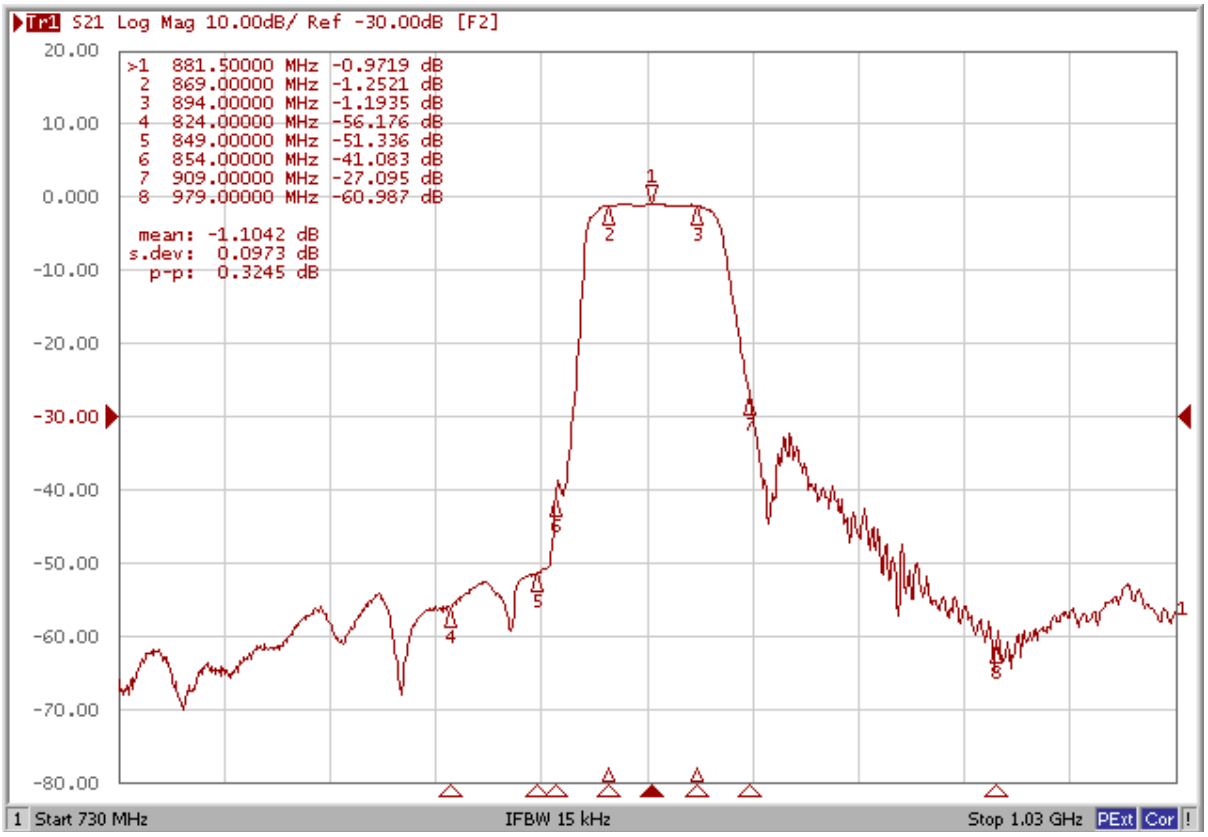
B. ELECTRICAL CHARACTERISTICS:

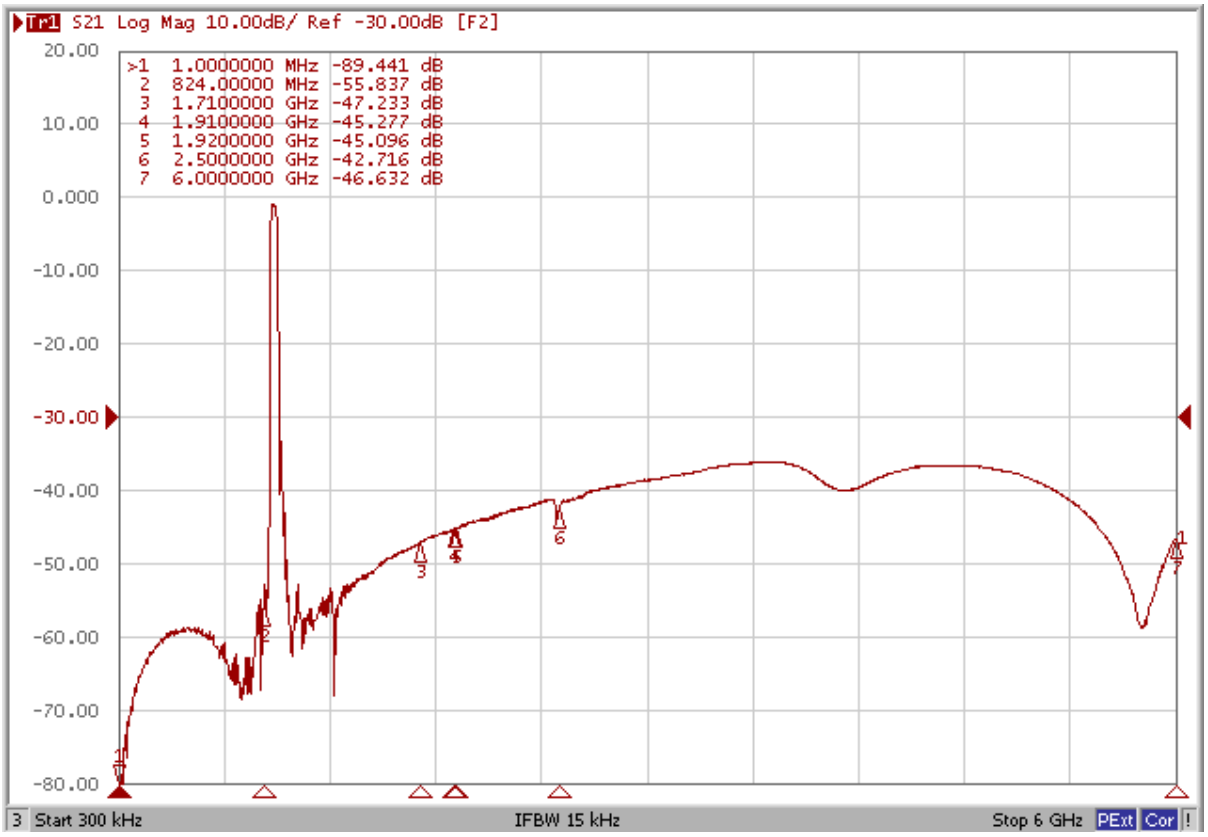
Source Impedance (single ended): 50Ω
Load Impedance (single ended): 50Ω

Parameters Description		Unit	Mini	Typical	Max
Center Frequency (Fo)		MHz	-	881.5	
Insertion Loss	869.0 ~ 894.0 MHz	dB	-	1.3	1.8
Amplitude Ripple		dB_{p-p}	-	0.3	1.1
Input **VSWR**		-	-	1.6	2.0
Output VSWR		-	-	1.6	2.0
Attenuation:					
1.0~ 824.0 MHz		dB	48	54	-
824.0 ~ 849.0 MHz		dB	46	51	-
849.0 ~ 854.0 MHz		dB	30	41	-
909.0 ~ 979.0 MHz		dB	20	27	-
1710.0 ~ 1910.0 MHz		dB	40	45	-
1920.0 ~ 2500.0 MHz		dB	35	41	-
2500.0 ~ 6000.0 MHz		dB	30	36	-

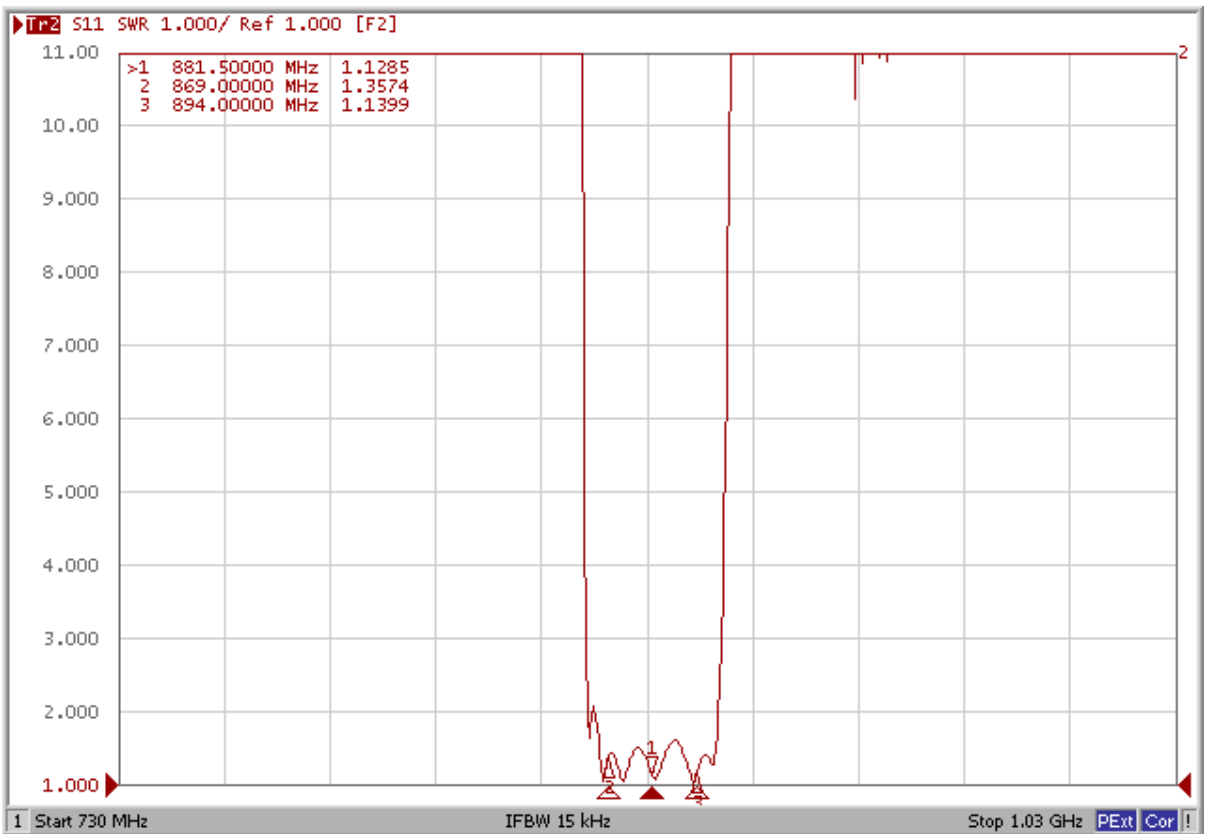
C. Frequency Characteristics :

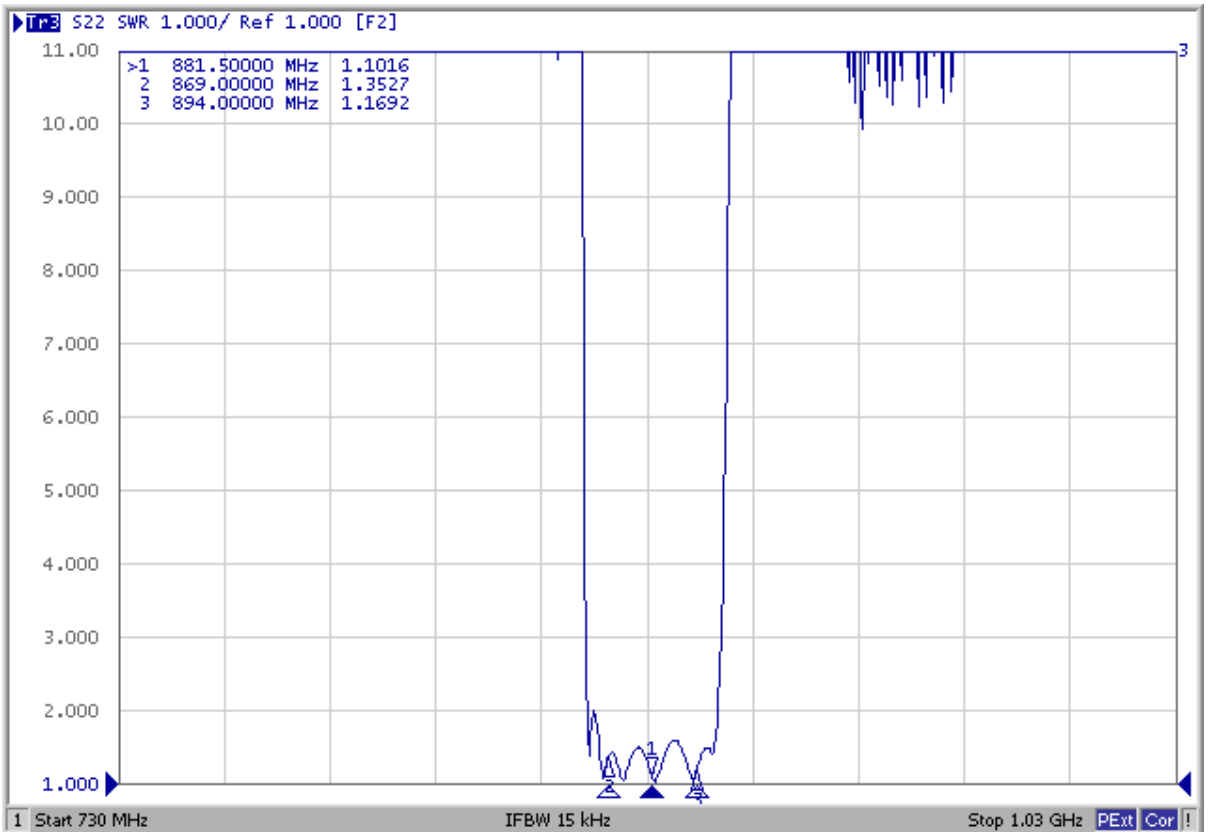
Frequency Response



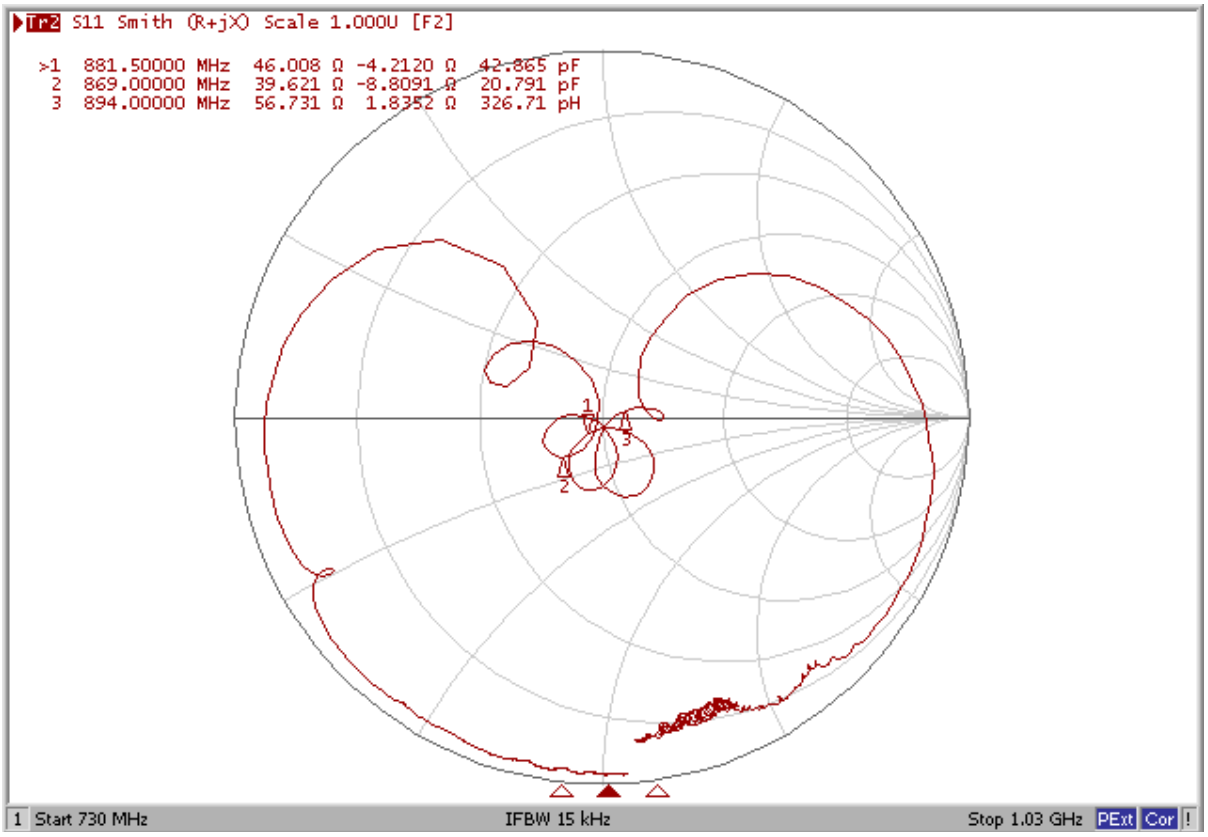


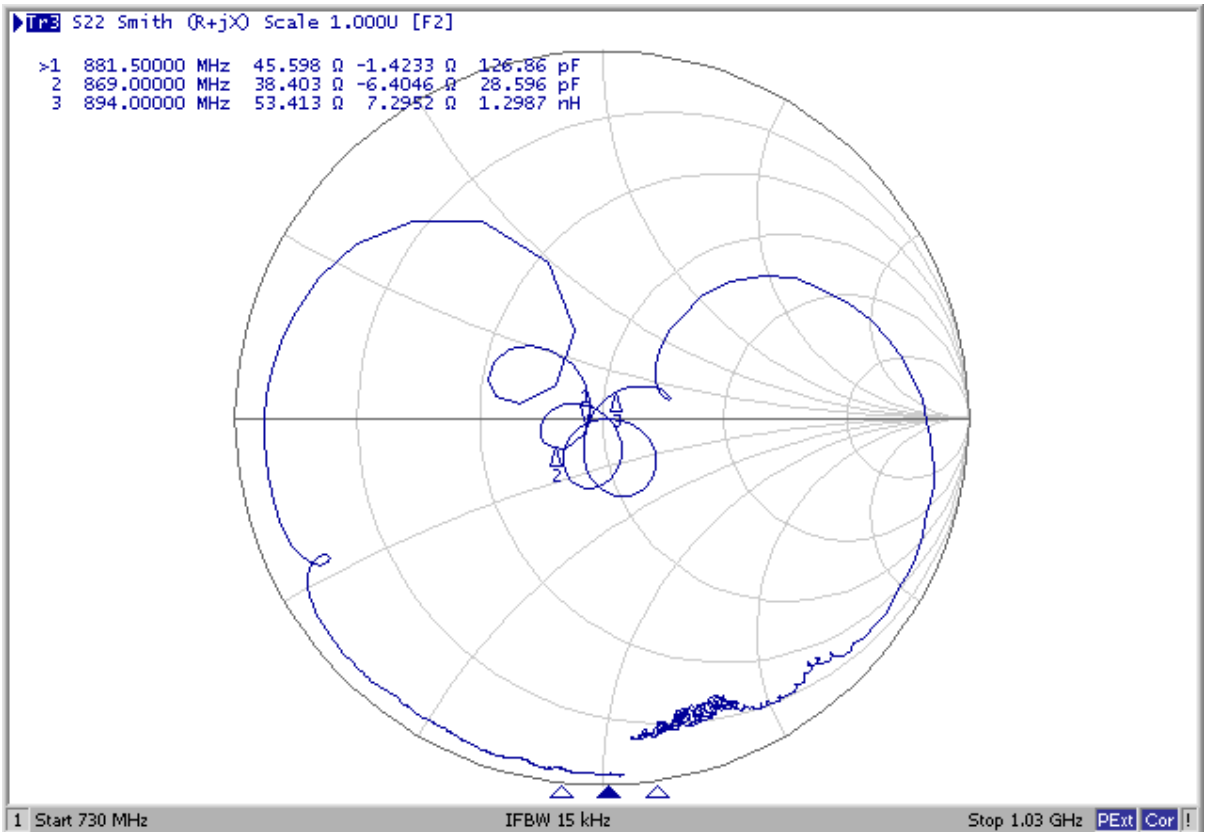
VSWR


Tr2 S11 SWR 1.000/ Ref 1.000 [F2]
>1 881.50000 MHz 1.1285
2 869.00000 MHz 1.3574
3 894.00000 MHz 1.1399
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Start 730 MHz
IFBW 15 kHz
Stop 1.03 GHz
PExt
Cor

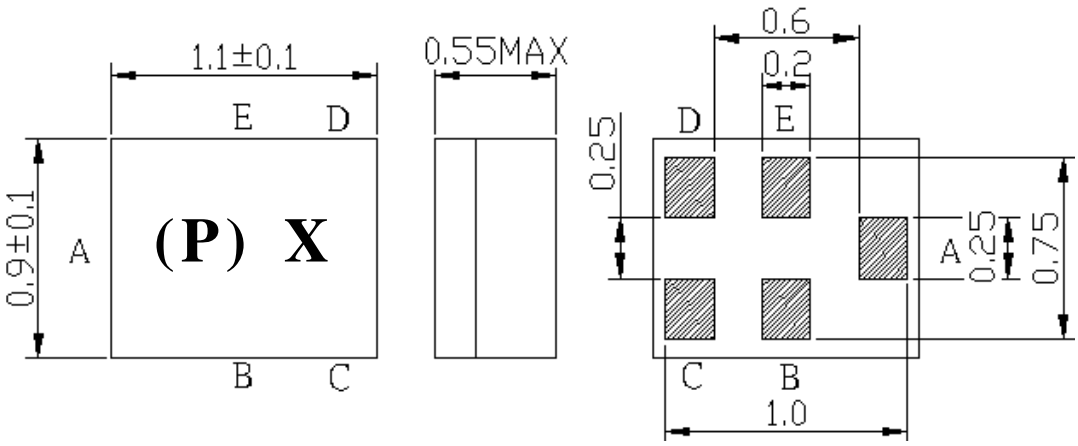

Tr3 S22 SWR 1.000/ Ref 1.000 [F2]
>1 881.50000 MHz 1.1016
2 869.00000 MHz 1.3527
3 894.00000 MHz 1.1692
11.00
10.00
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
1 Start 730 MHz
IFBW 15 kHz
Stop 1.03 GHz
PExt
Cor

Smith Chart


Tr2 S11 Smith (R+jX) Scale 1.000U [F2]
>1 881.50000 MHz 46.008 Ω -4.2120 Ω 42.865 pF
2 869.00000 MHz 39.621 Ω -8.8091 Ω 20.791 pF
3 894.00000 MHz 56.731 Ω 1.8352 Ω 326.71 pH
1 Start 730 MHz
IFBW 15 kHz
Stop 1.03 GHz
PExt
Cor


Tr3 S22 Smith (R+jX) Scale 1.000U [F2]
>1 881.50000 MHz 45.598 Ω -1.4233 Ω 126.86 pF
2 869.00000 MHz 38.403 Ω -6.4046 Ω 28.596 pF
3 894.00000 MHz 53.413 Ω 7.2952 Ω 1.2987 nH
1 Start 730 MHz
IFBW 15 kHz
Stop 1.03 GHz
PExt
Cor

D.OUTLINE DRAWING:



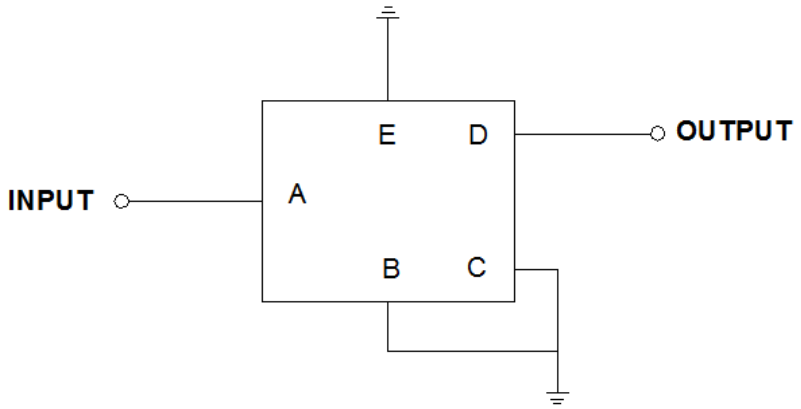
Marking Descriptions	
(P)	Series Number
X	Date Code(Year+Month)

Pin Description	
B, C , E	Ground
A	Input
D	Output

Product date Code :

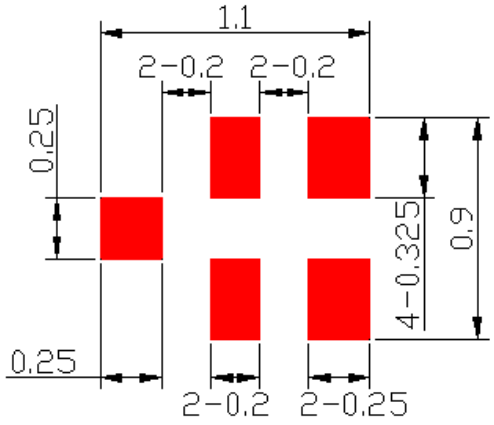
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z

E. MEASUREMENT CIRCUIT:



Source & Load Impedance: 50 Ω

F. PCB Footprint :



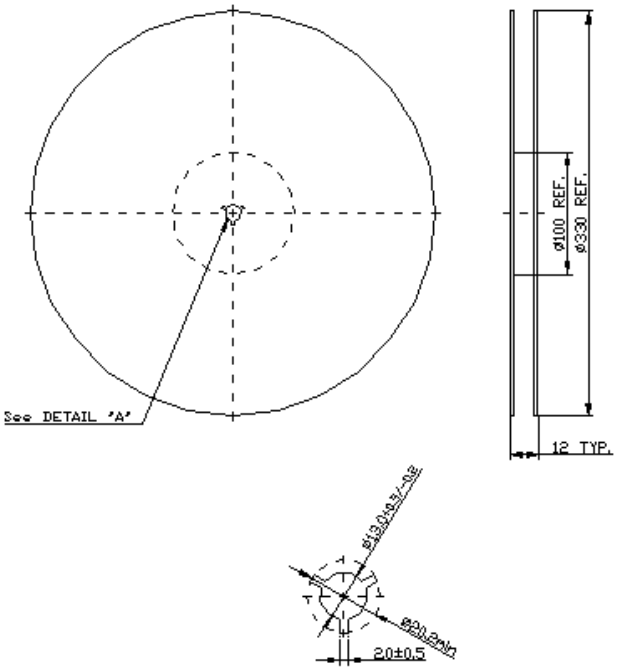
: Land Pattern

Unit: mm

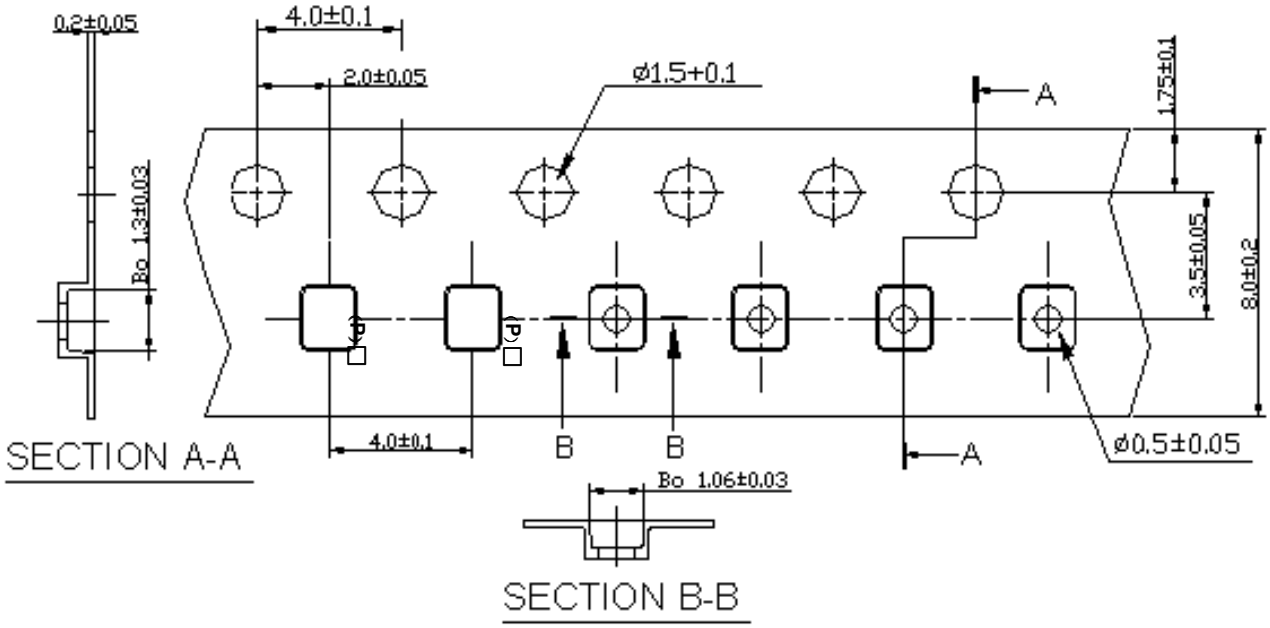
G. PACKING:

1. REEL DIMENSION

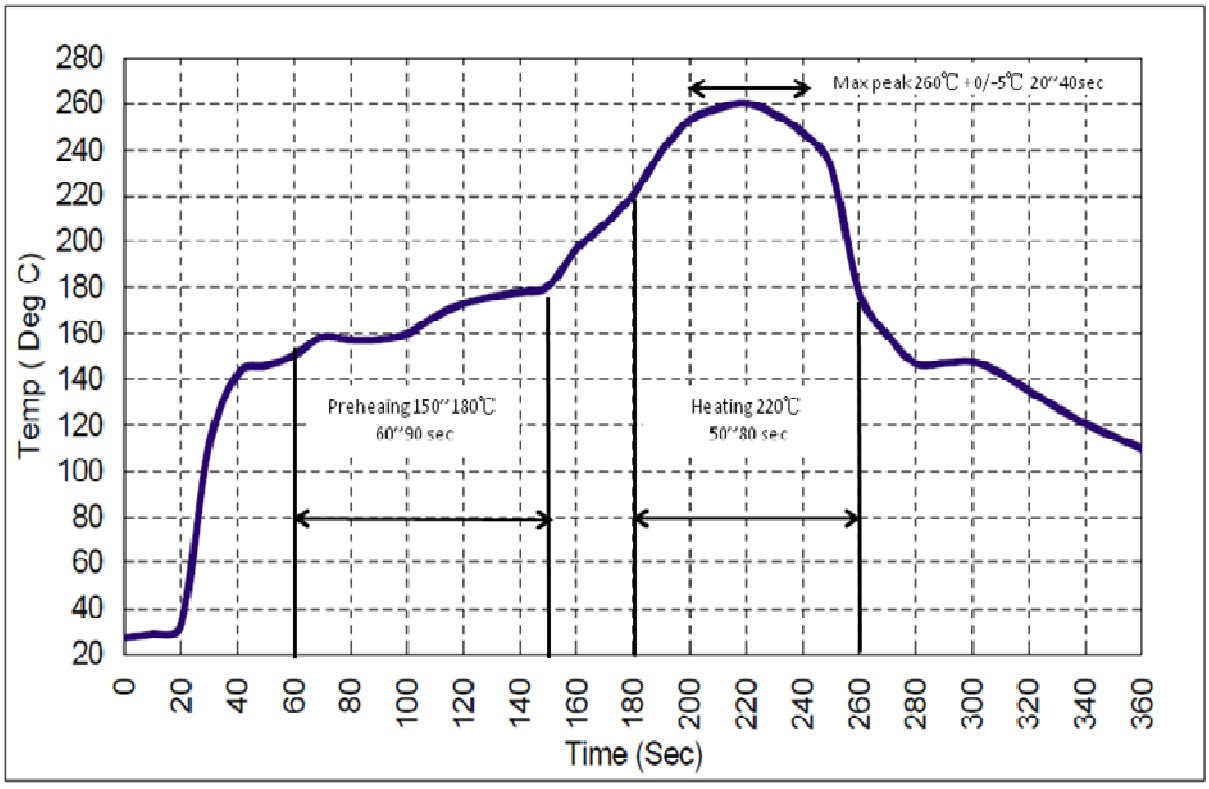
(Please refer to FR-75D10 for packing quantity)



2.TAPE DIMENSION



Direction of

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.