



TAI-SAW TECHNOLOGY CO., LTD.

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Product Specifications Approval Sheet

Product Name: SAW Filter 1030 MHz (BW 10 MHz) SMD 3.0X3.0 mm

TST Parts No.: TA1980A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Sam Lin *Sam Lin*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2020/01/17

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 1030 MHz (BW 10 MHz) SMD 3.0X3.0 mm

MODEL NO.:TA1980A

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: +15 dBm (+20 dBm Max)
2. DC Voltage : 3 V
3. Operating Temperature: -55°C to +85°C
4. Storage Temperature: -55°C to +125°C
5. Moisture Sensitivity Level: Level 1 (MSL1)

RoHS Compliant
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

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

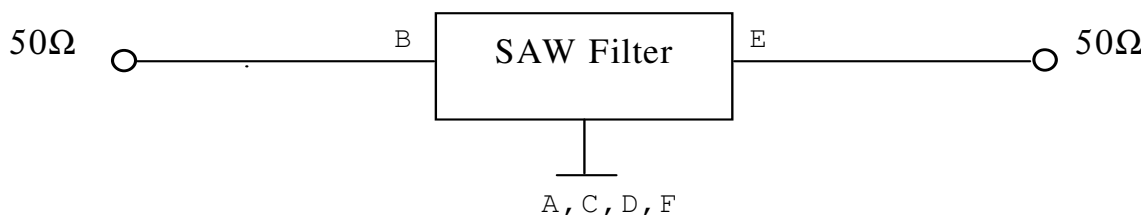
Terminating load impedance(single) : $Z_L = 50 \Omega$

Item	Unit	Min.	Typ.	Max
Center frequency Fc	MHz	-	1030	-
Insertion Loss (1025 ~ 1035 MHz) IL	dB	-	3.0	4.0
Amplitude ripple (1025 ~ 1035 MHz)	dB	-	0.8	2.0
Maximum Absolute Group Delay(1025 ~ 1035 MHz)	ns	-	65*	80
Group Delay Variation (1025 ~ 1035 MHz)	ns	-	16*	80
Attenuation (Reference level from 0 dB at MHz)				
500 ~ 946	dB	40	42	-
949 ~ 980	dB	38	42	-
980 ~ 990	Db	40	42	-
1005	dB	30	40	-
1055	dB	30	40	-
1080 ~ 1400	dB	40	42	-
1400 ~ 1600	dB	35	41	-
Temperature coefficient of frequency	ppm/°C	-	-36	-

*Measure at 2% smoothing factor

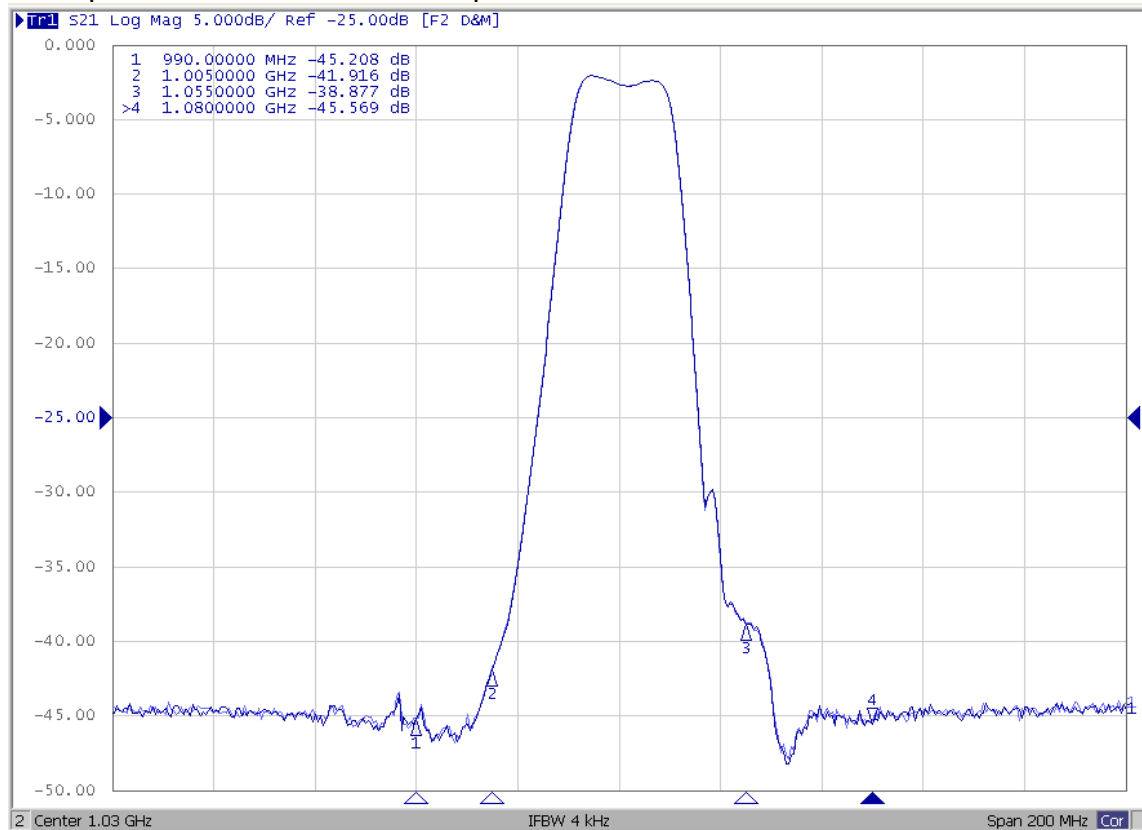
C. TEST CIRCUIT:

HP Network analyzer

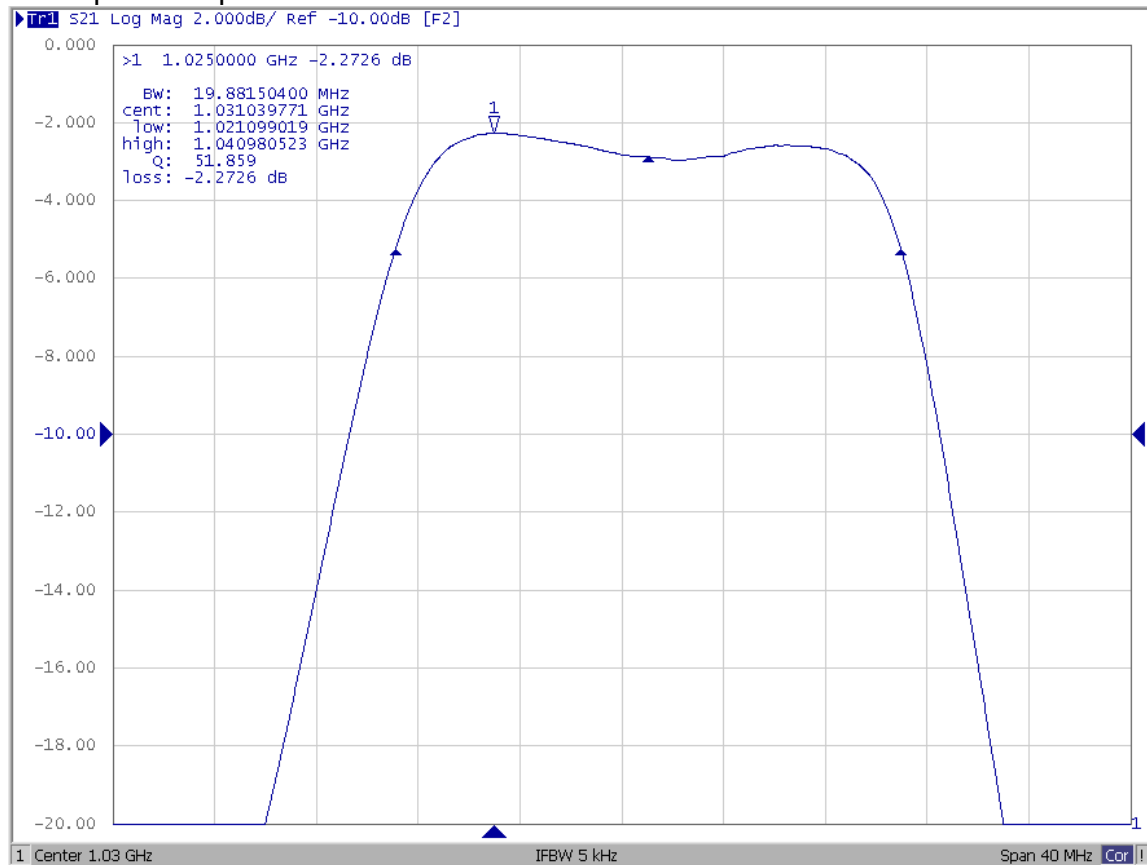


D. Frequency Characteristics:

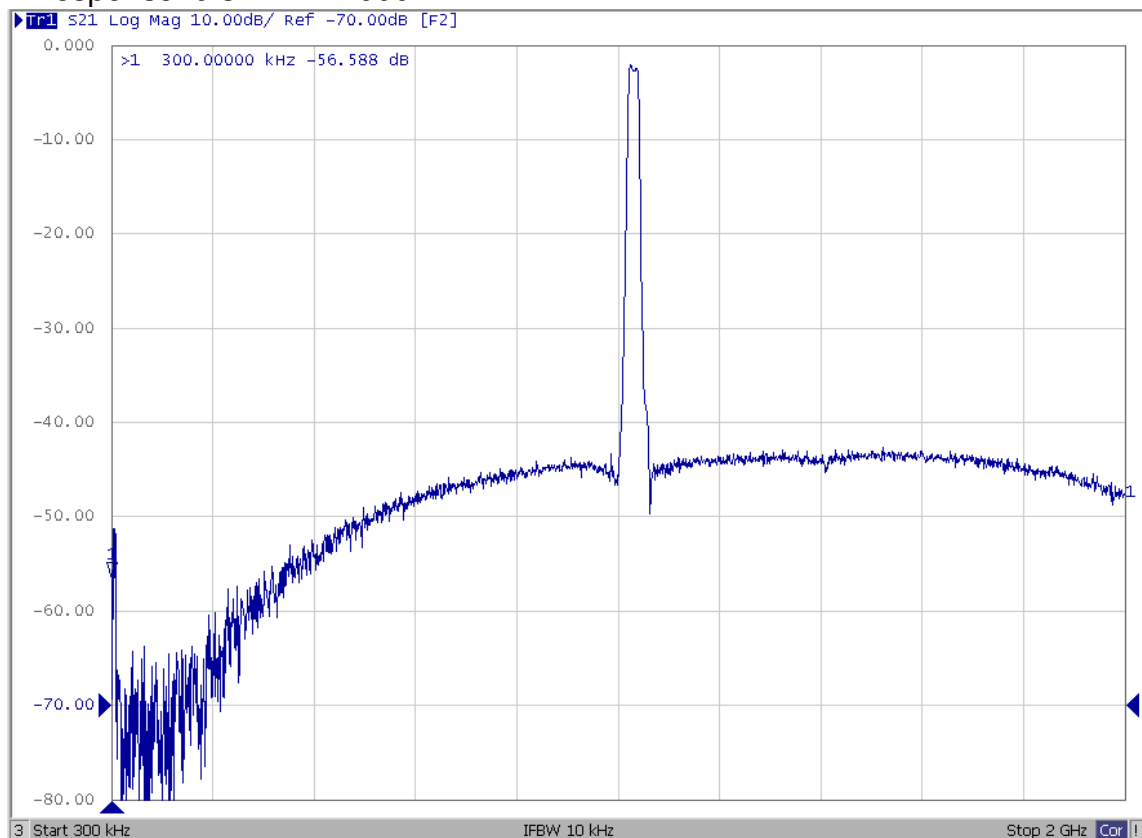
S21 response: Center 1030MHz, Span 200MHz



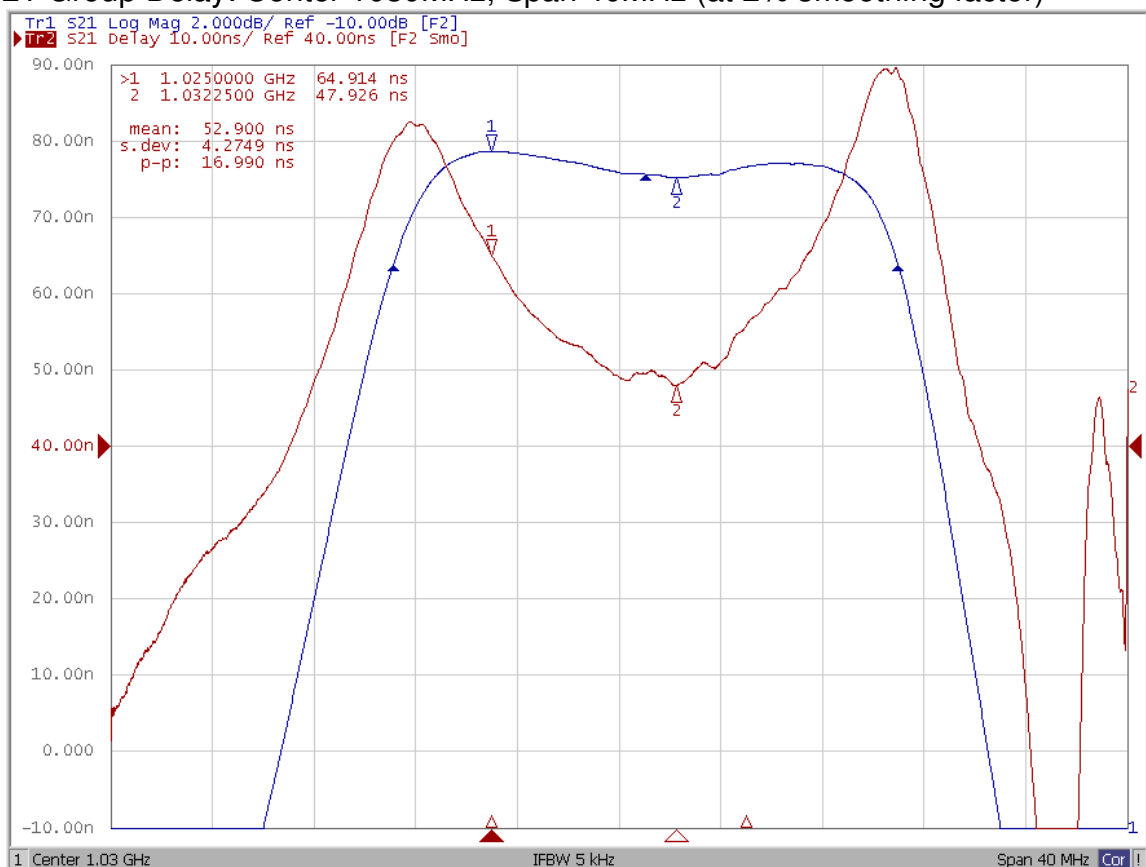
S21 responds: Span 40MHz



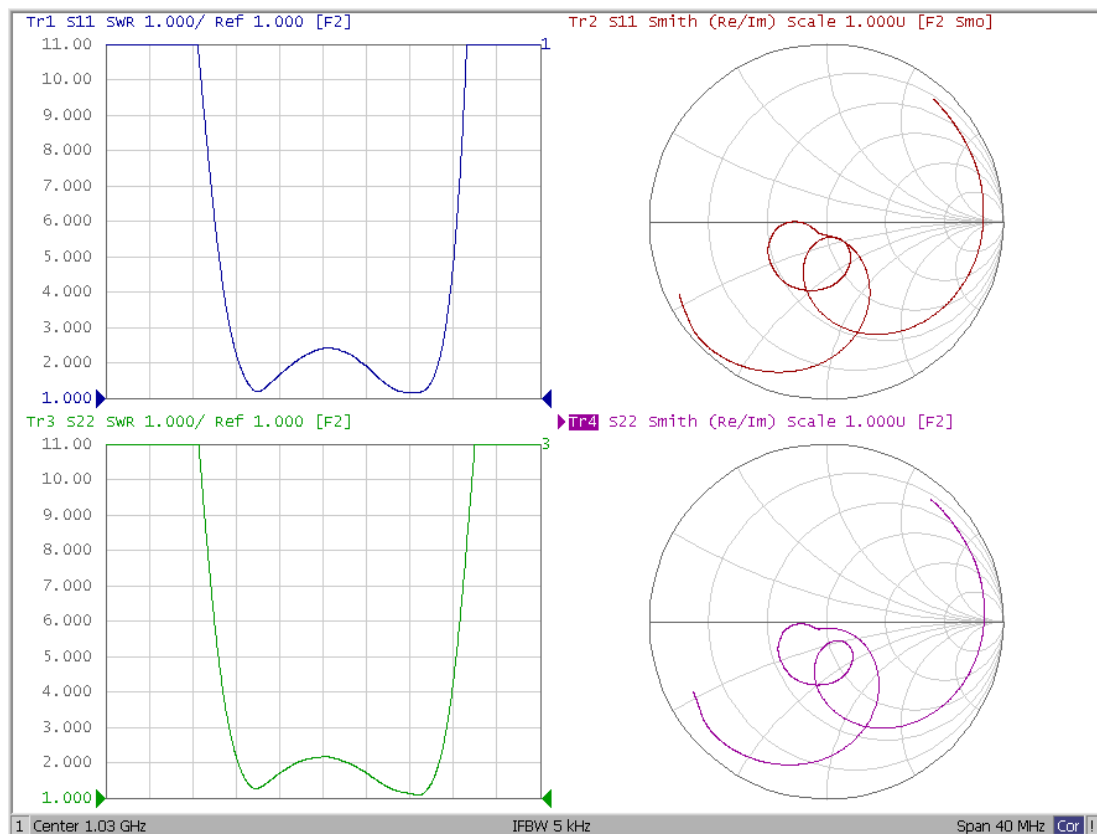
S21 response: 0.3MHz ~ 2000MHz



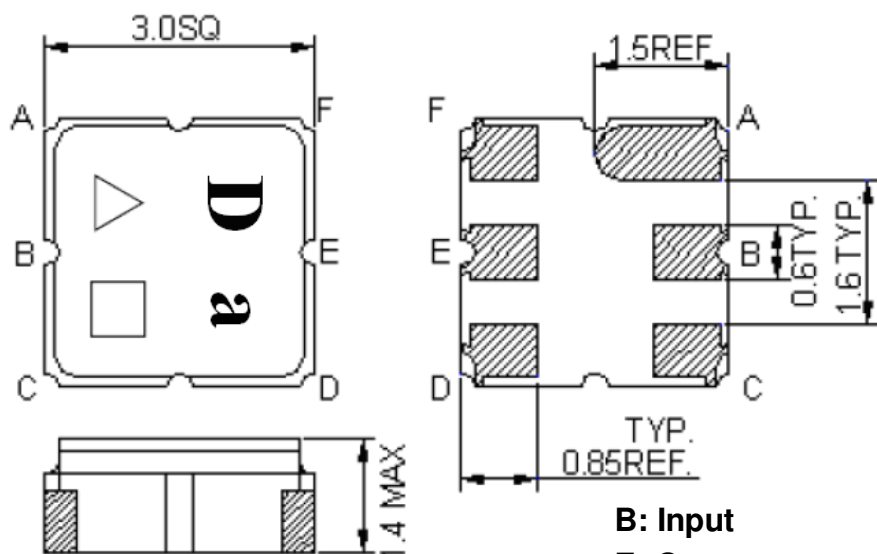
S21 Group Delay: Center 1030MHz, Span 40MHz (at 2% smoothing factor)



Reflection Characteristic



E.OUTLINE DRAWING:



△ : Year Code (2009->9, 2010->0,..., 2018->8)

□ : Date Code (Follow the table from planner each year)

B: Input

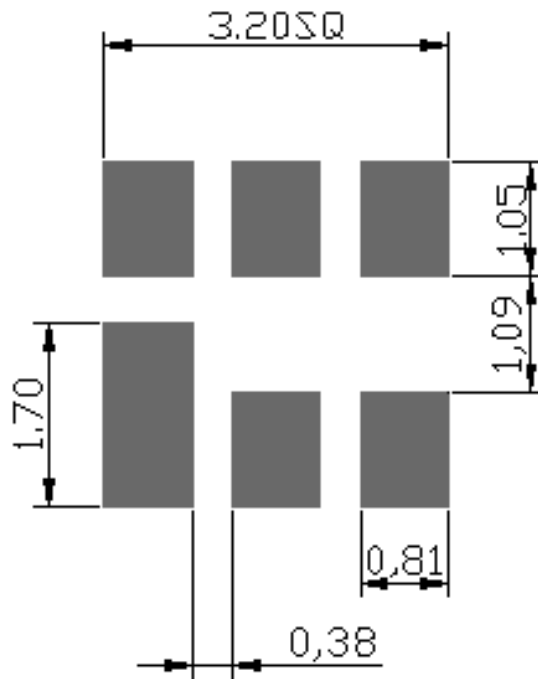
E: Output

A, C, D, F: Ground

Unit: mm

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

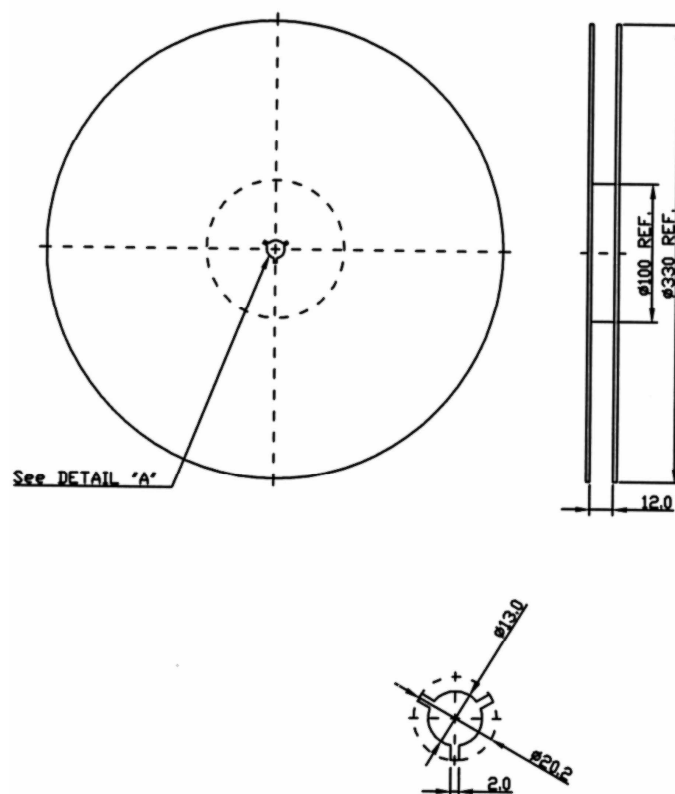
F. PCB FOOTPRINT:



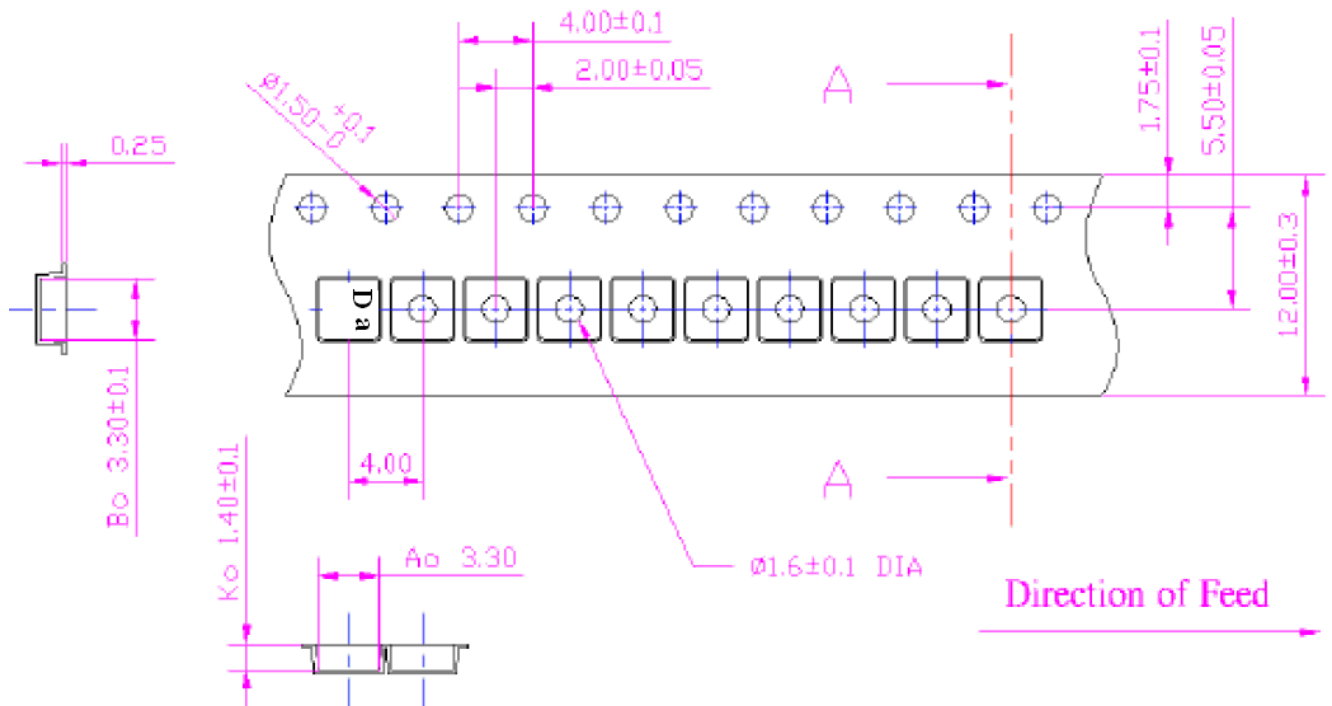
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at $150 \sim 180^{\circ}\text{C}$ 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 $260^{\circ}\text{C} +0/-5^{\circ}\text{C}$ peak (20~40sec).
4. Time: 2 times.

