



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 Filter 836.5 MHz Band 5 Tx SMD 1.1×0.9 mm (BW=25 MHz)

TST Parts No.: TA1692A

Customer Part No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Egbert Huang *Egbert Huang*

Date: _____ 2017/09/14

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 836.5 MHz

MODEL NO.: TA1692A

REV. No.: 4.0

A. MAXIMUM RATING:

1. Maximum Input Power: 13 dBm(in passband)
2. Operating Temperature: -30 °C to +85 °C
3. Storage Temperature: -40 °C to +100 °C
4. ESD: 100 V(MM), 200 V(HBM)
5. Moisture Sensitive Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: $Z_s = 50 \Omega$

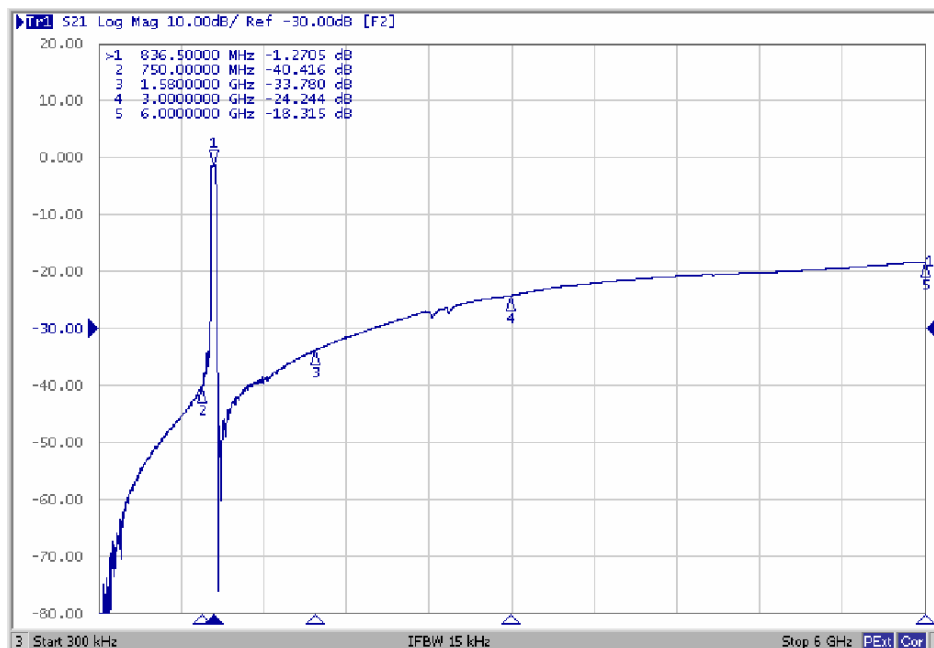
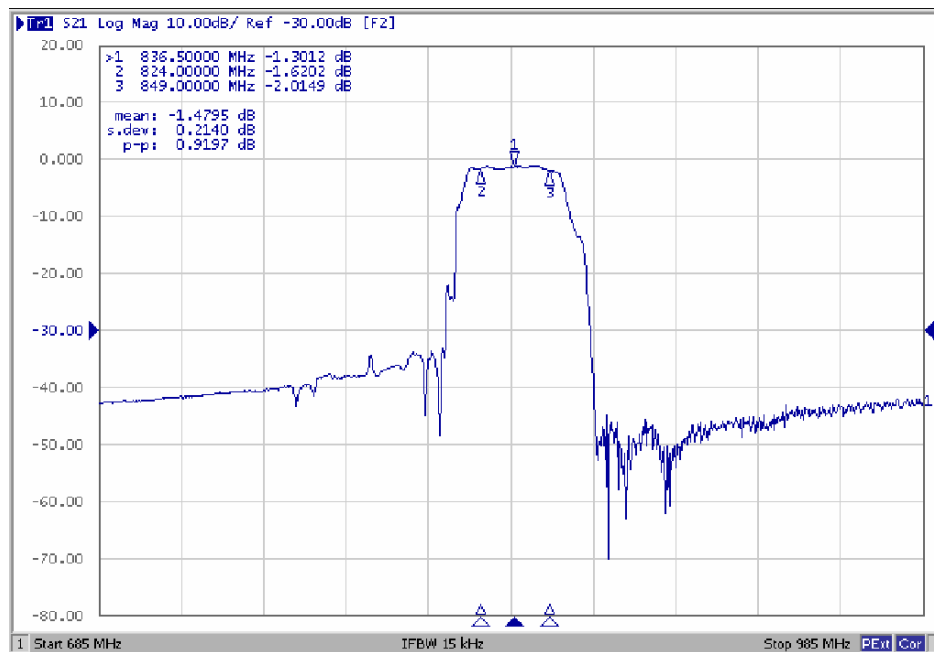
Terminating load impedance: $Z_L = 50 \Omega$

Parameters Description		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	836.5	-
Insertion Loss	824~849 MHz	dB	-	1.9	2.3
Amplitude ripple	824~849 MHz	dB _{p-p}	-	0.8	1.3
VSWR(Input)	824~849 MHz	-	-	2.0	2.3
VSWR(Output)	824~849 MHz	-	-	2.0	2.3
Attenuation:					
DC~750 MHz		dB	35	41	-
750~800 MHz		dB	28	34	-
869~894 MHz		dB	40	45	-
894~1050 MHz		dB	38	42	-
1050~1210 MHz		dB	35	40	-
1210~1580 MHz		dB	30	35	-
1580~2000 MHz		dB	28	32	-
2000~3000 MHz		dB	23	27	-
3000~6000 MHz		dB	12	18	-

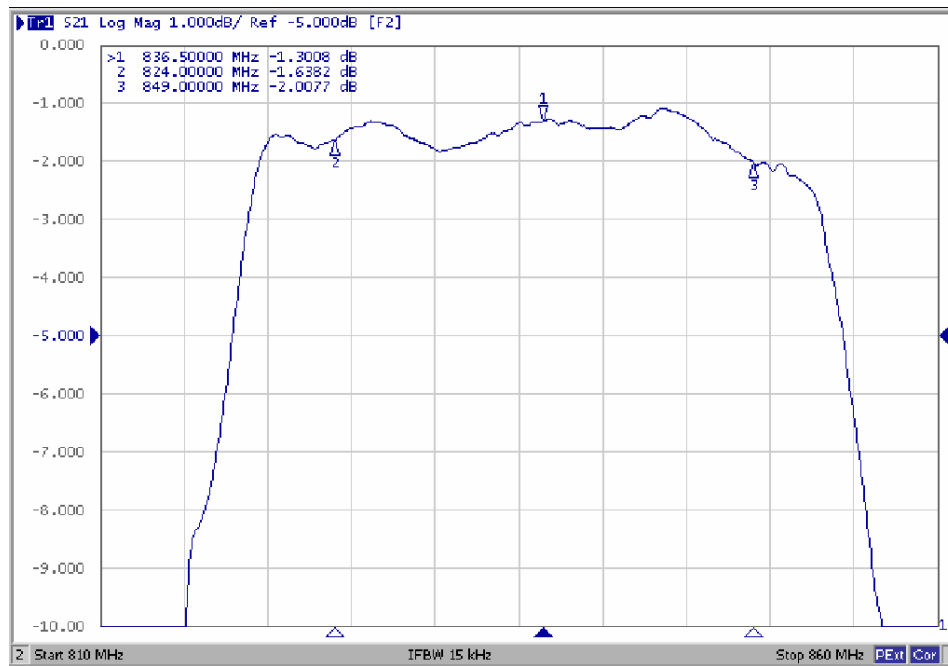
Notes: (1) No Matching Network.

C. FREQUENCY CHARACTERISTIC:

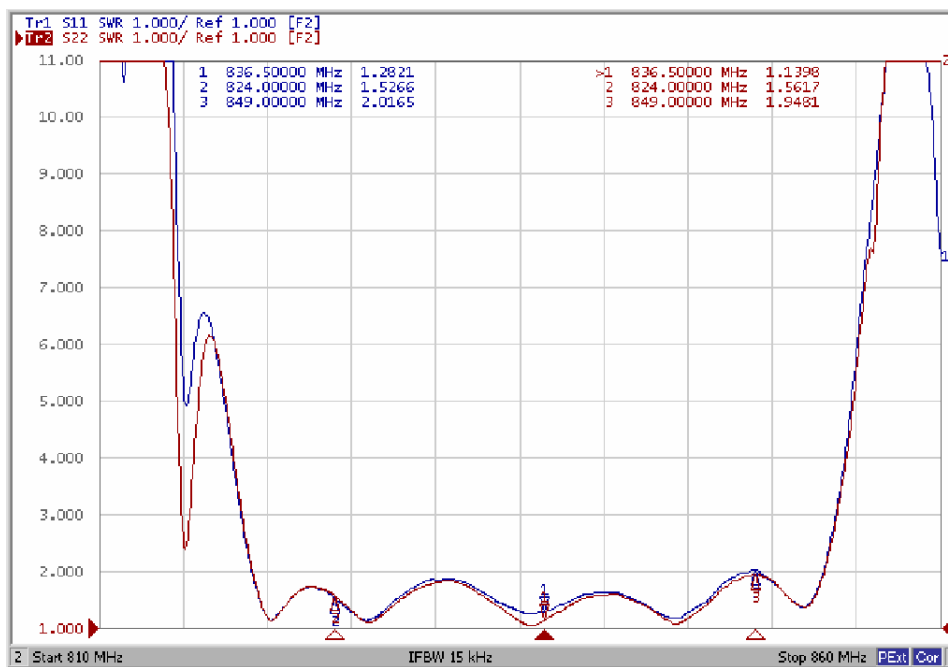
Frequency Response



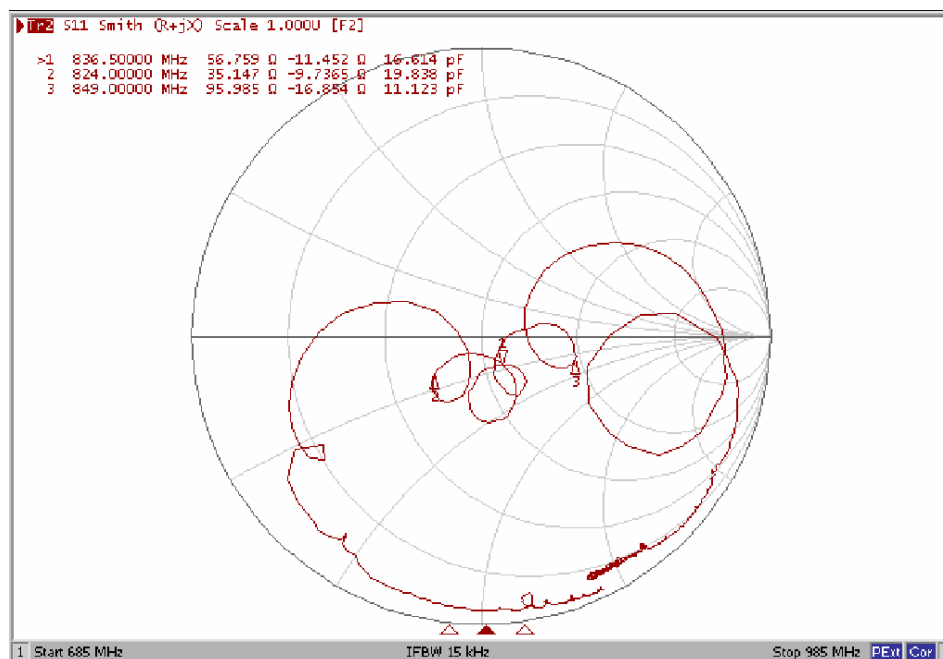
Ripple



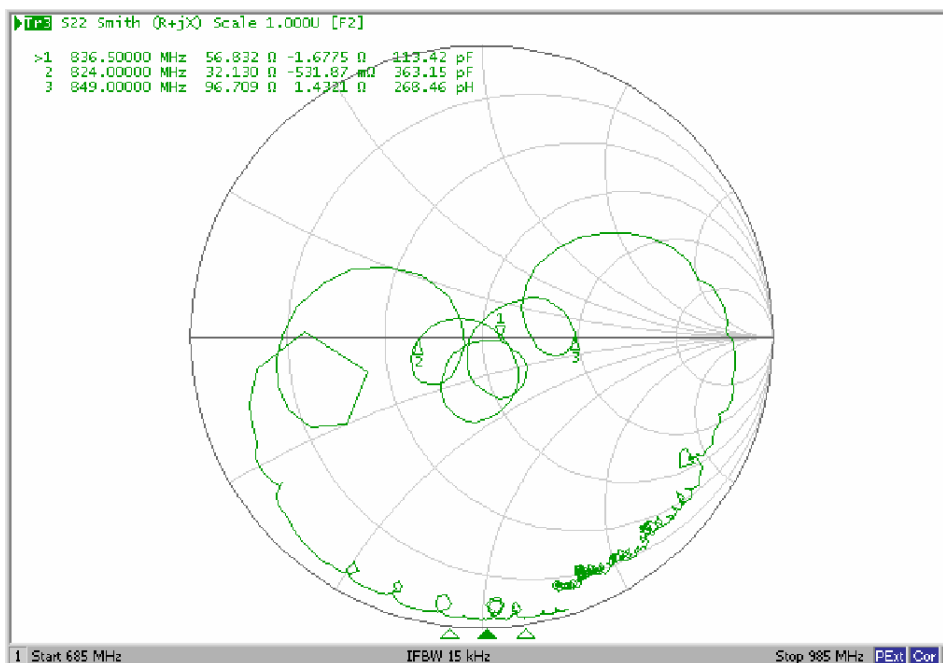
VSWR



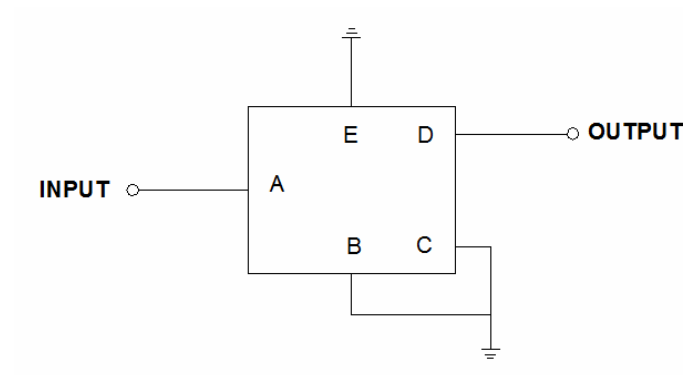
Smith Chart (S11)



Smith Chart (S22)

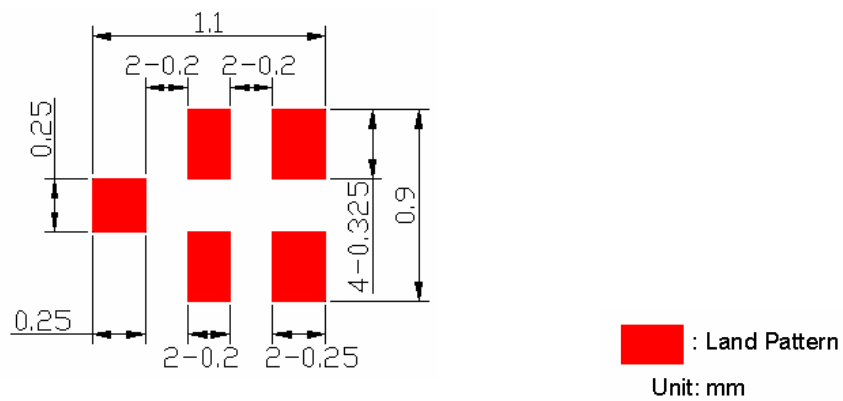


D. MEASUREMENT CIRCUIT:



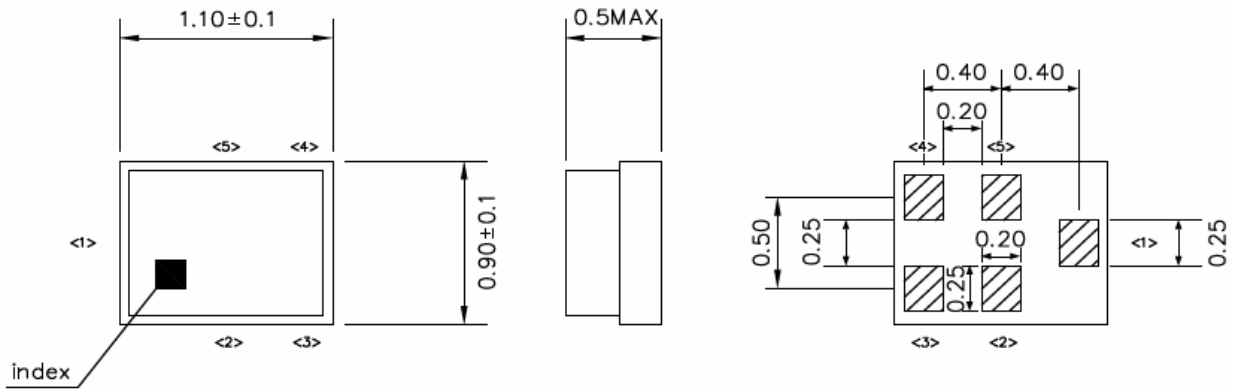
Source & Load Impedance: 50 Ω

E. PCB Footprint:



F. OUTLINE DRAWING:

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

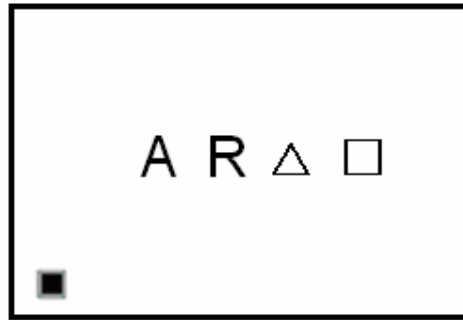


Unit : mm

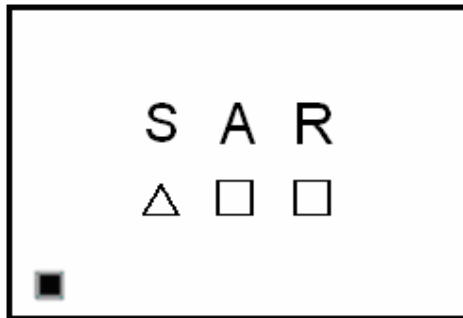
Pin Configuration

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

Top View (Sample Production):



Top View (Mass Production):



△ : Date Code

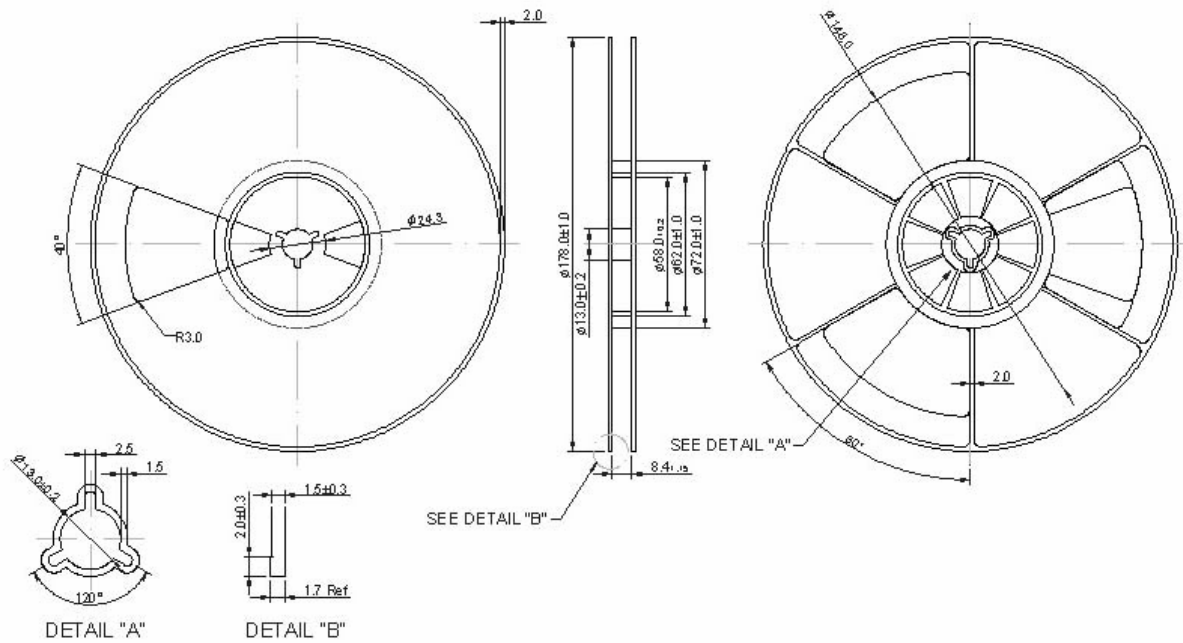
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code:

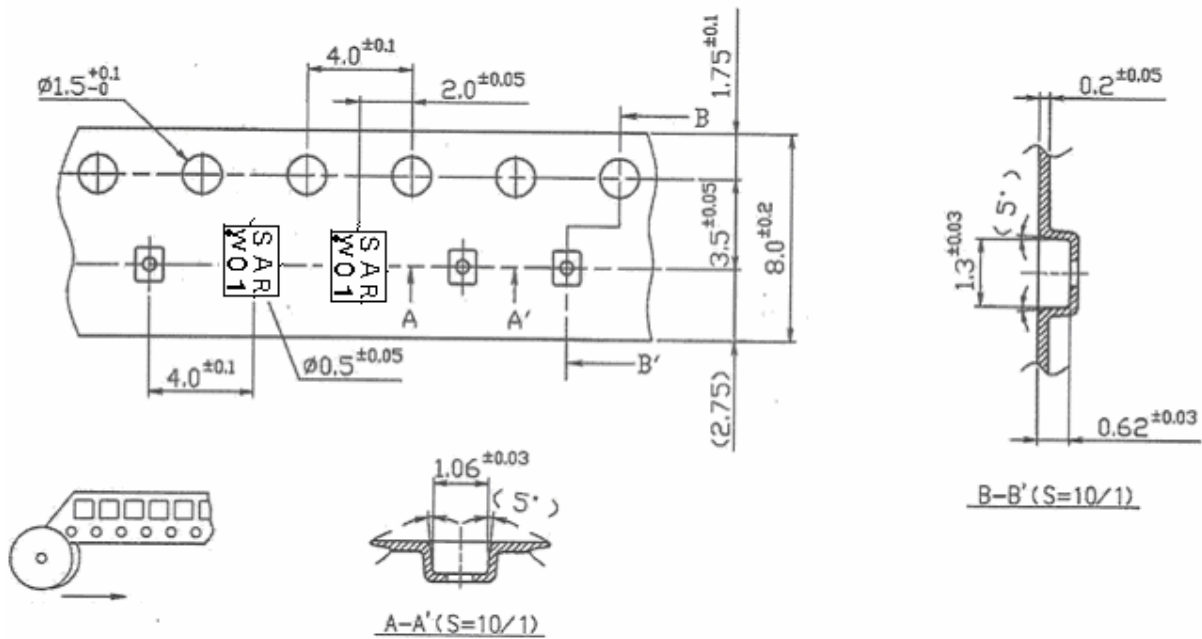
Year	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	▽	W	X	Y	Z

G. PACKING: (Ref: WI-75M03)

1. REEL DIMENSION



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 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ peak (20~40sec).
4. Time: 2 times.

