



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: 279.7 MHz 55MHz BW SMD 5.0X5.0mm IF SAW Filter

TST Parts No.: TB0969A

Customer Parts No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Kazuma Lee

Approval by: _____ Bob Chau

Date: _____ 09 / 02 / 2014

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 279.7MHz 55MHz BW (SMD 5.0×5.0 mm)

MODEL NO.: TB0969A

REV. NO.2

A. MAXIMUM RATING:

1. Operating temperature range: -30°C to 85°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level : 10 dBm
4. Maximum DC Voltage : 10V

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

B. Characteristics :

Item	Unit	Min.	Type.	Max.
Center frequency, Fc	MHz	-	279.7	-
Insertion Loss, IL	dB	-	13.5	16.0
-1dB bandwidth	MHz	55	57.5	-
-40dB bandwidth	MHz	-	71	80
Passband Ripple Fc+/- 25MHz	dB	-	0.5	1.0
Attenuation:(Reference level from Min IL)				
DC ~ 180MHz	dB	45	55	-
180MHz ~ 215MHz	dB	40	54	-
345MHz ~ 380MHz	dB	40	50	-
380MHz ~ 480MHz	dB	45	55	-
480MHz ~640MHz	dB	35	42	-
640MHz ~ 1000MHz	dB	45	65	-
Temperature Coefficient	ppm/°C	-	-94	-
Source Impedance	Ohm	-	50	-
Load Impedance	Ohm	-	50	-

C. Frequency Characteristics :

(1) Wide band Response:(span 400MHz)

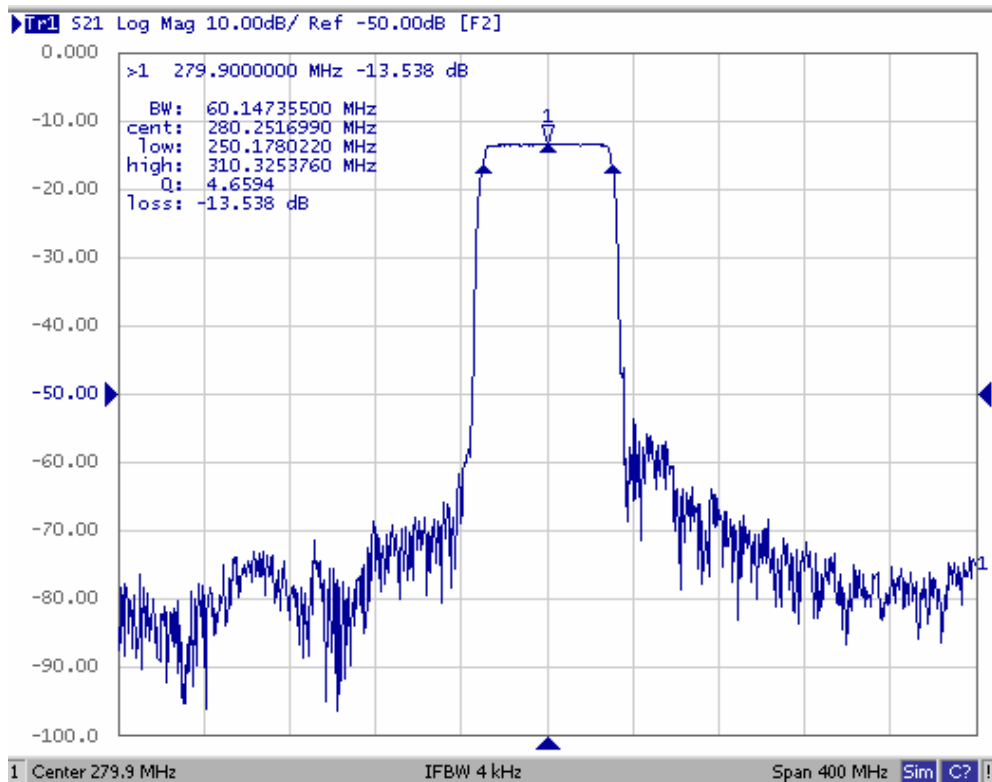


Fig1. Horizontal: 40MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

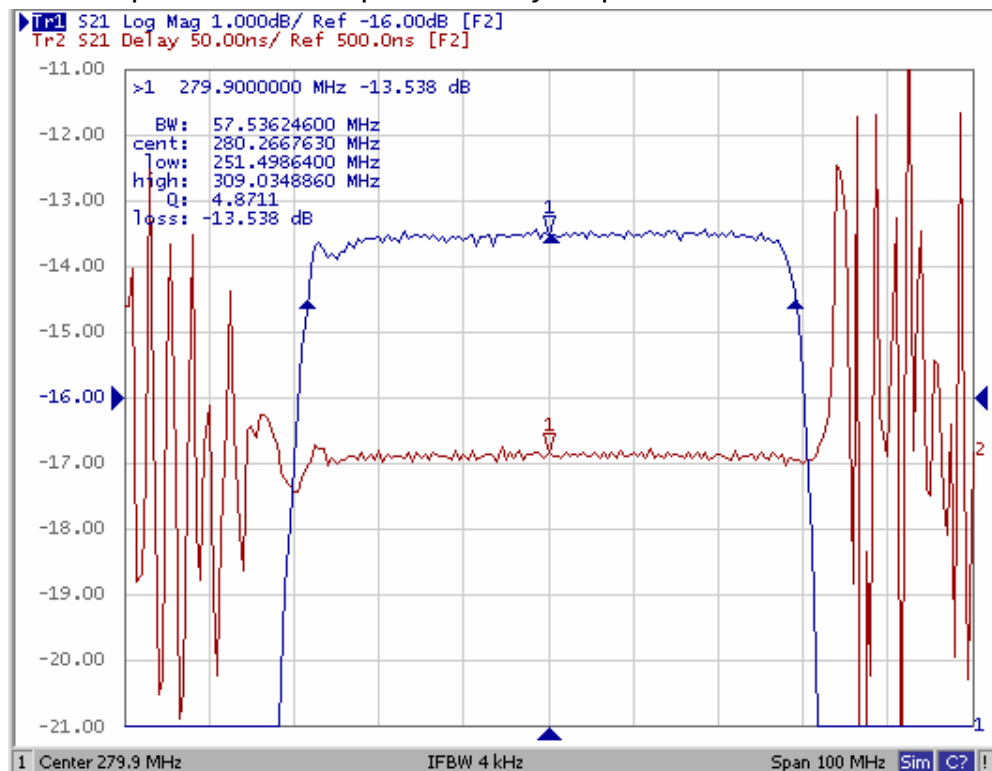
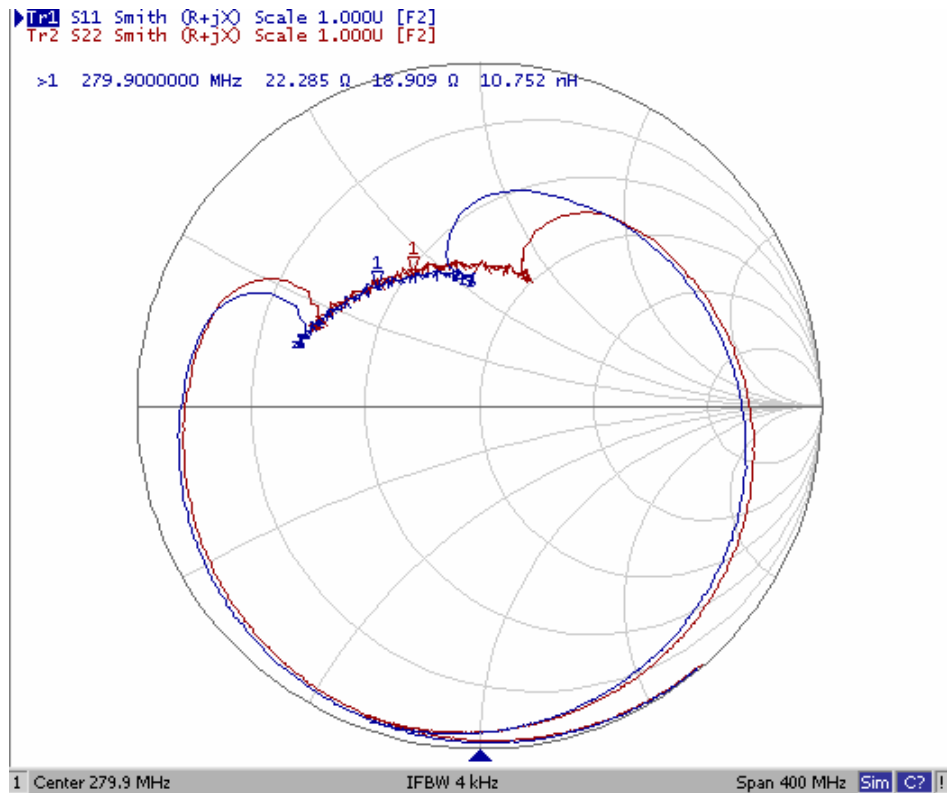


Fig2. Horizontal: 10MHz/Div Vertical: 1dB/Div
Vertical: 50ns/Div

(3) Smith Chart:



(4) Wide Band:

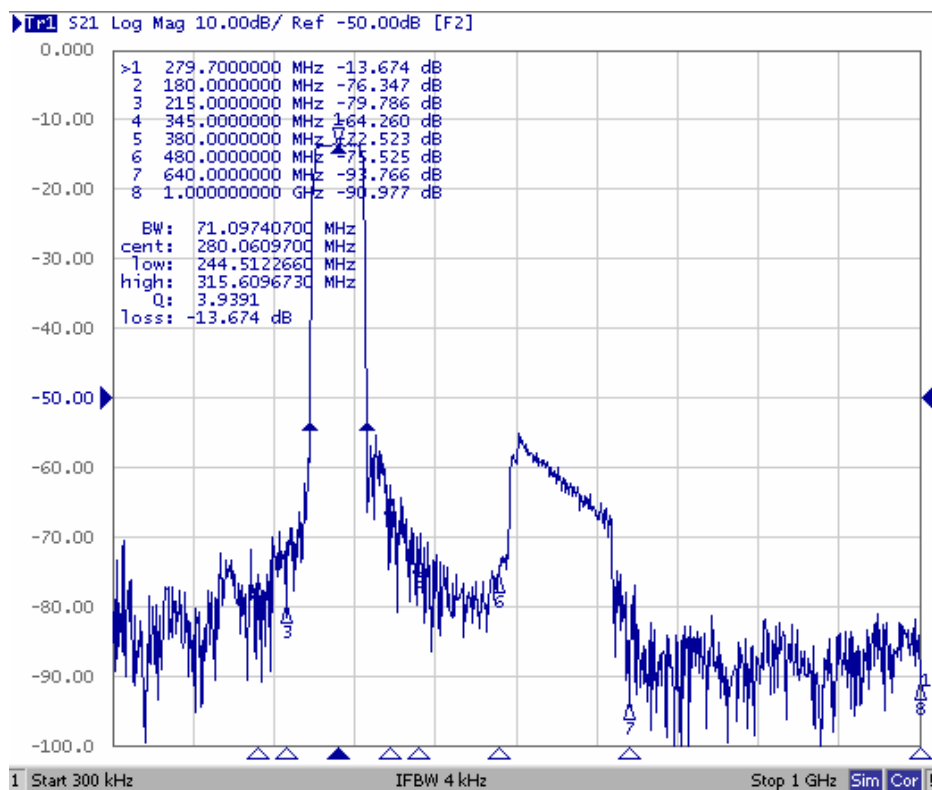
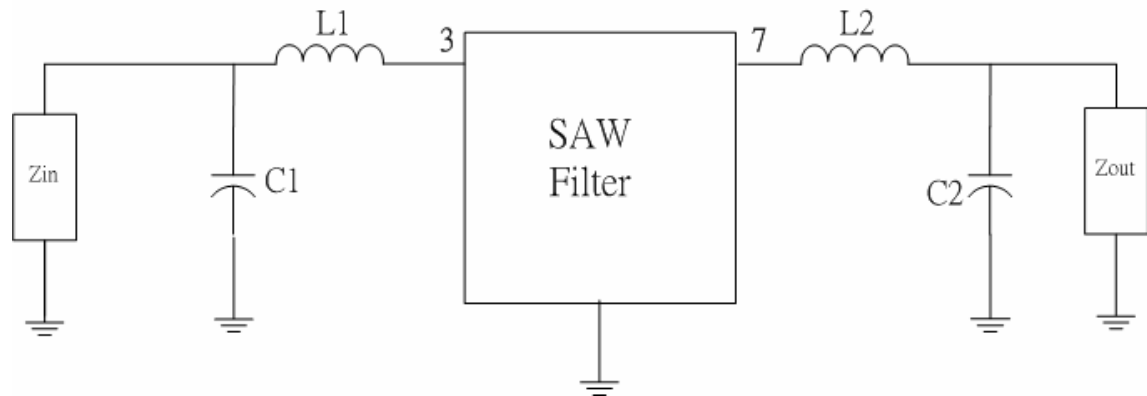
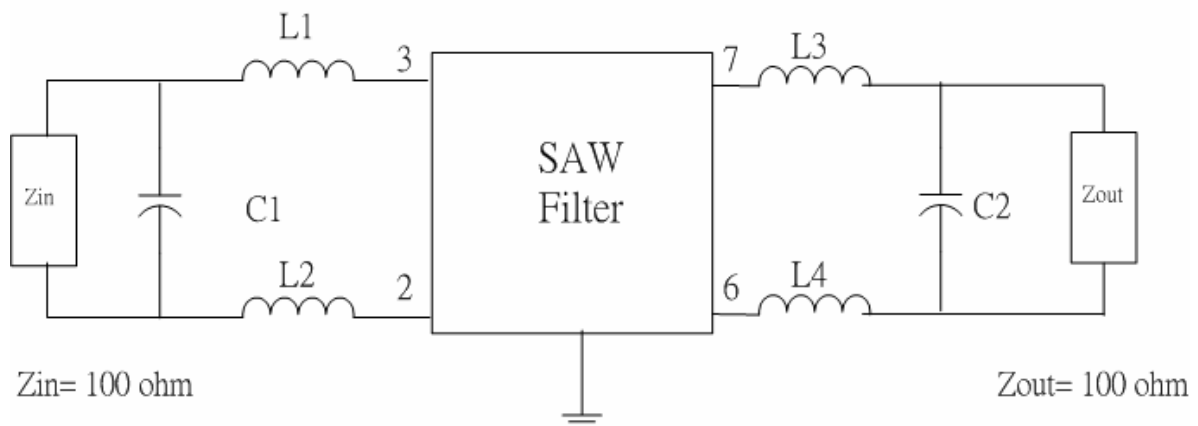


Fig4. Horizontal: 100MHz/Div Vertical: 10dB/Div

D. Matching Circuit:



$$Z_{in}=Z_{out}=50\text{ohm } L1=43\text{nH } L2=47\text{nH } C1=8\text{pF } C2=8\text{pF}$$

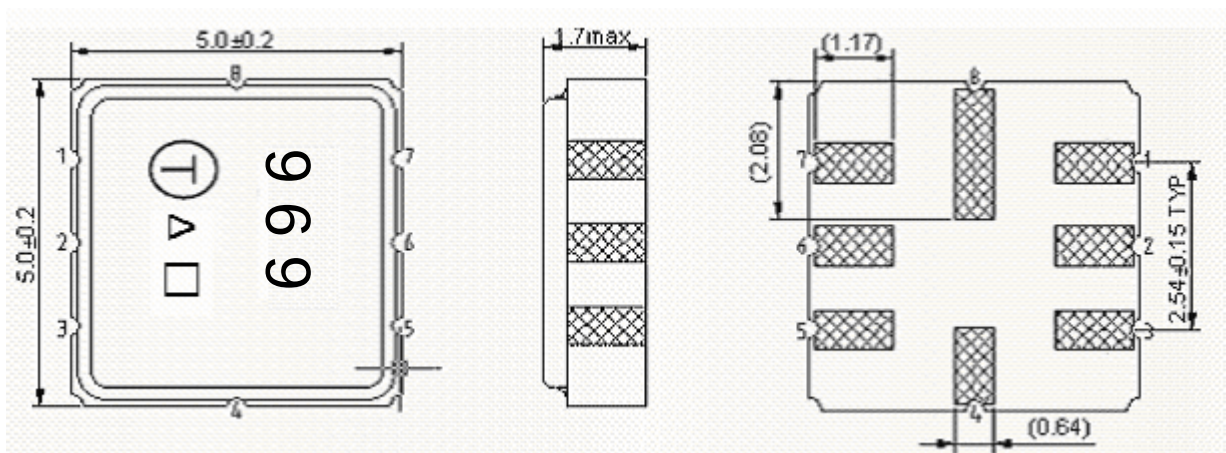


$Z_{in}= 100 \text{ ohm}$

$Z_{out}= 100 \text{ ohm}$

$$L1=L2=36\text{nH } L3=L4=39\text{nH } C1=7\text{pF } C2=8\text{pF}$$

E. Outline Drawing:



#3 –Input

#2 –Input ground or Balance Input

#7 – Output

#6 – Output ground Balance Output

#1,4,5,8 – Ground

□ : Week Code

Unit : mm

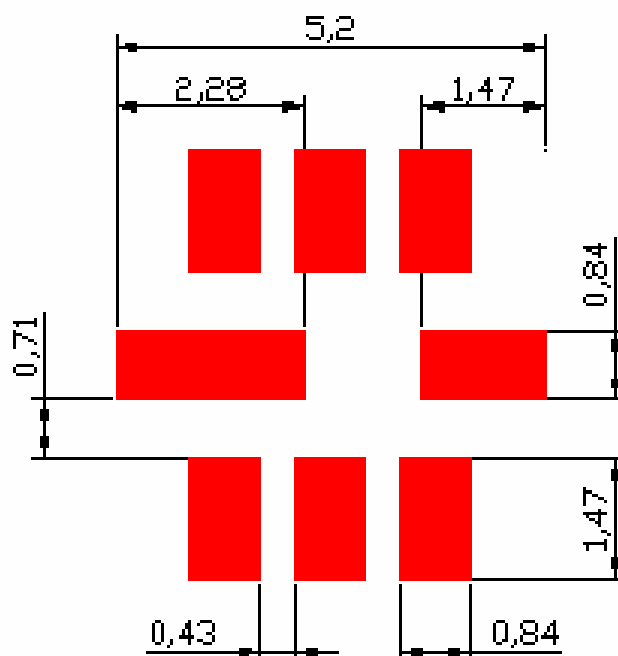
△ : Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	<u>B</u>	<u>b</u>

Week Code Table

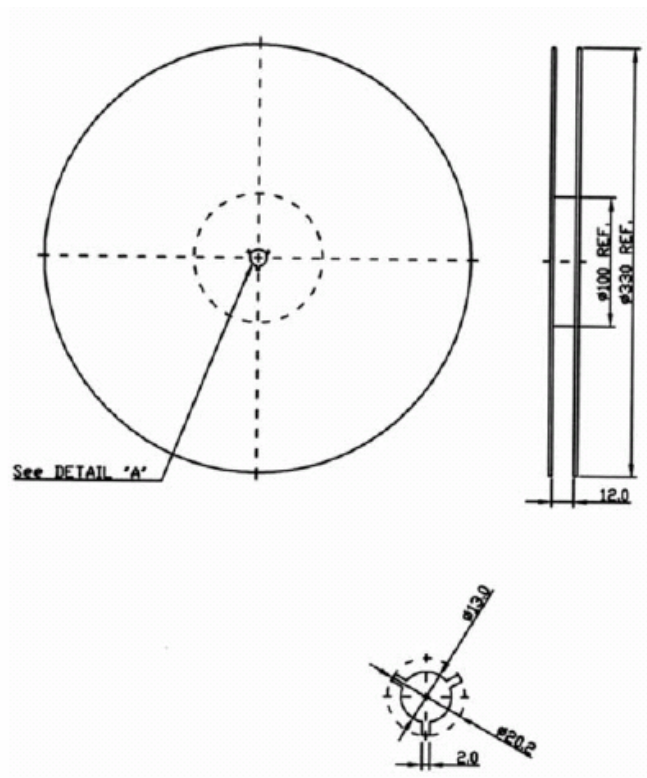
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

F. PCB Footprint:

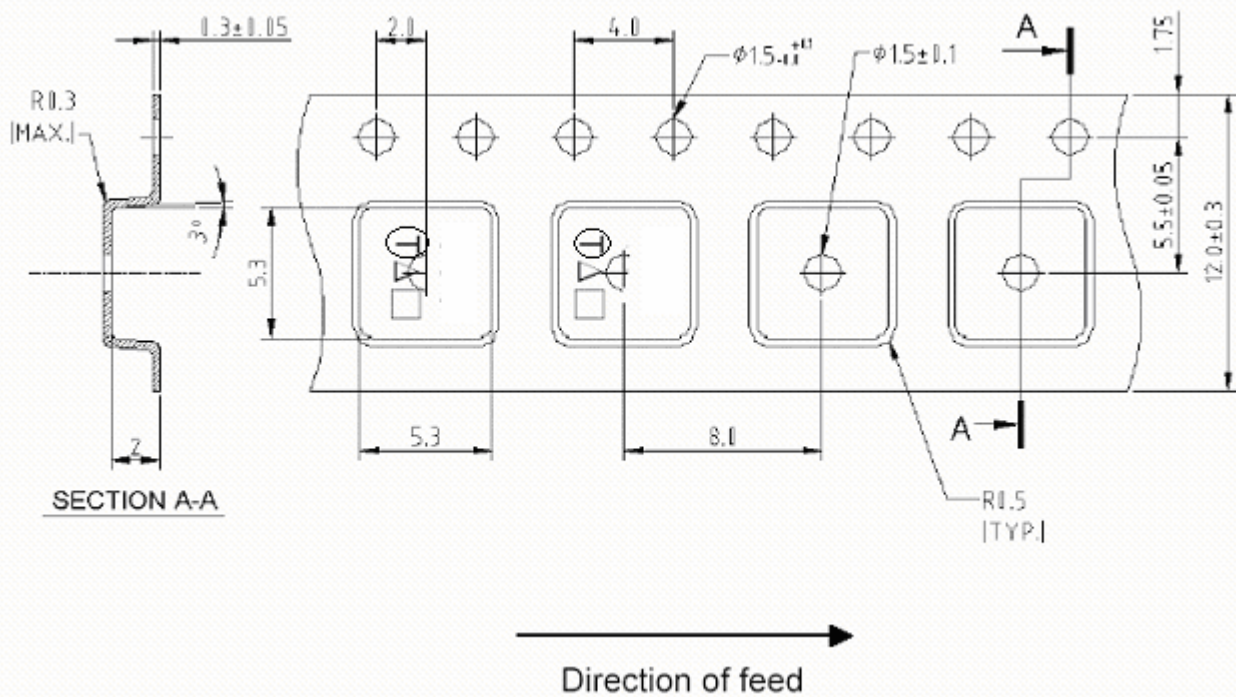


G. PACKING:

1. REEL DIMENSION: (Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION:



H. RECOMMENDED REFLOW PROFILE_:

