



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Approval Sheet For Product Specification

Issued Date: 1/5/2005 (REV. NO: 1)

Product Name: SMD 5x7 21.7MHz Crystal Filter

TST Parts No.: TY0136A

Customer Parts No. : \_\_\_\_\_

Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: \_\_\_\_\_ CC Hsu

Approval by: \_\_\_\_\_ TF Yang

Date: \_\_\_\_\_ 1/5/2005



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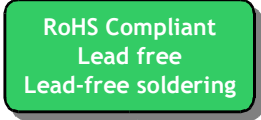
## SMD 5x7 21.7MHz Crystal Filter

MODEL NO.: TY0136A

REV. NO.: 1

### Features:

- Surface Mount Seam Weld Package
- 3-pole IF Filter
- High Reliability



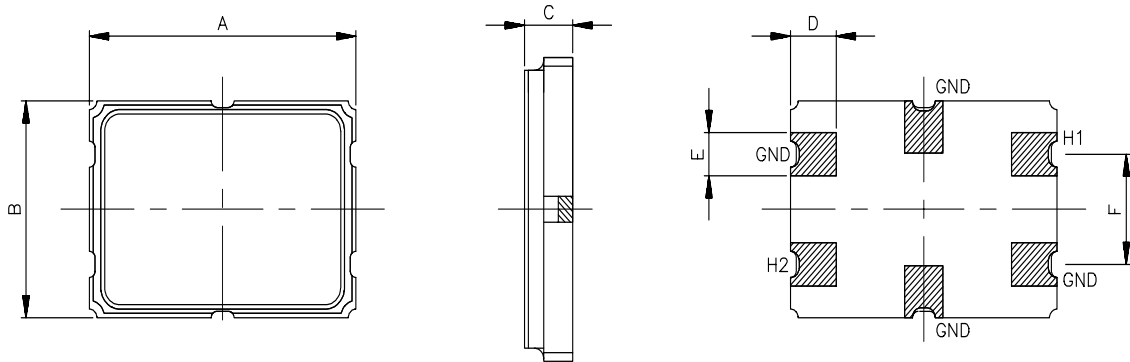
### Description and Applications:

Surface mount 5.0mmx7.0mm crystal filter for use in wireless telecommunication devices.

### Electrical Specifications:

TY0136A	Specification
Center Frequency Fo	21.7 MHz, Fundamental
Insertion Loss	3.0 dB max.
Ripple (@+/-3.75 KHz)	1.0 dB max.
3 dB Passband	+/- 3.75 KHz
Stopband (@+/- 20 KHz)	20 dB min
Ultimate Attenuation @ Fo-910 KHz	60 dB min
Spurious	10 dB min
Terminating Impedance	850Ω// 6pF
Operating Temperature	-20°C ~ +70°C
Marking	Laser marking

## Mechanical Dimensions (mm):

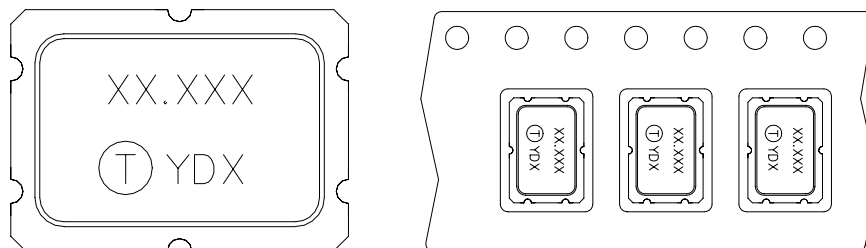


A	B	C	D	E	F
<b>7.00</b> <b>±0.18</b>	<b>5.00</b> <b>±0.18</b>	<b>1.27</b> <b>±0.20</b>	<b>1.21</b> <b>±0.13</b>	<b>0.99</b> <b>±0.13</b>	<b>2.54</b> <b>±0.13</b>

## Marking:

Line 1: 21.700 (Customer Frequency)

Line 2: TST Logo + Crystal Filter Product Code + Date Code



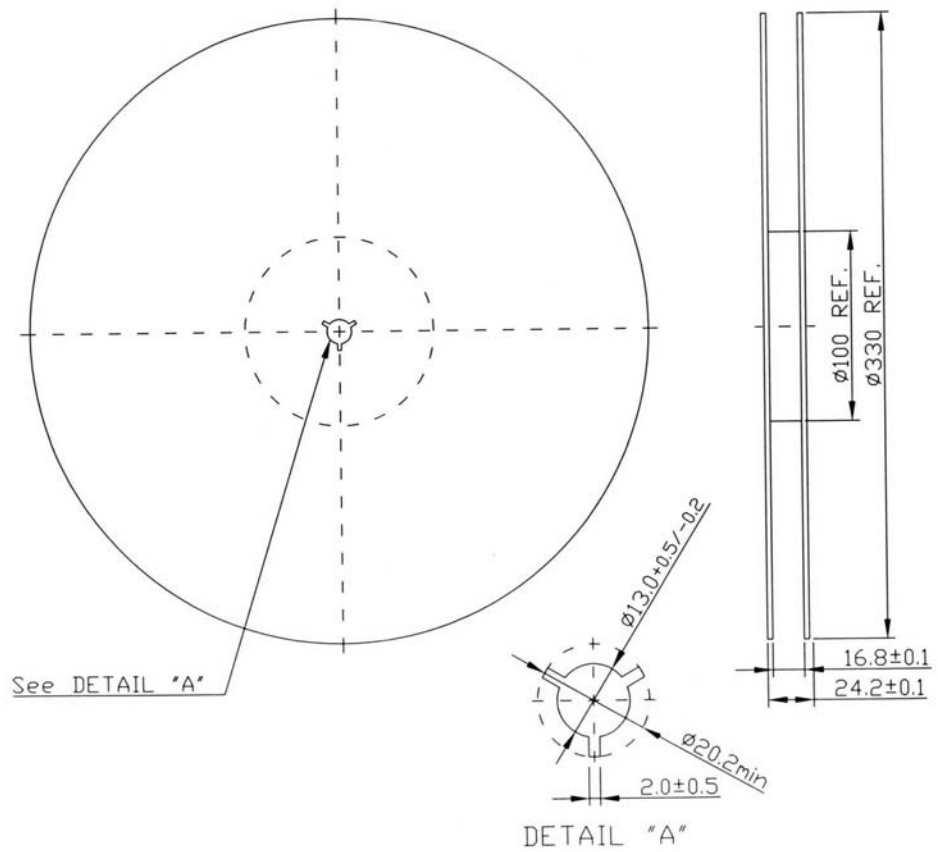
## Product Code Table

Year	2001 2005	2002 2006	2003 2007	2004 2008
Product Code	Y	y	<u>Y</u>	<u>y</u>

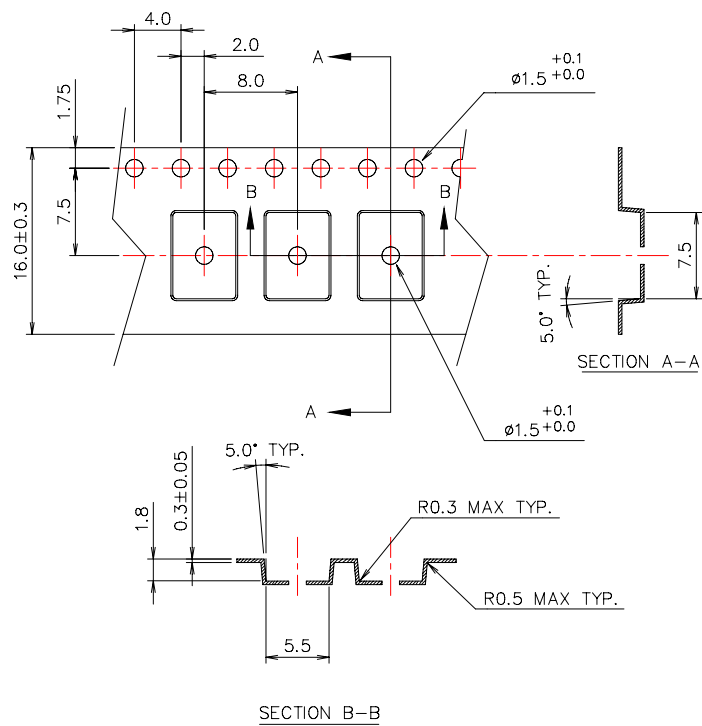
## Date Code Table

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

## Reel Dimensions (mm):



## Tape Dimensions (mm):



# Reflow Profile:

1. Preheating shall be fixed at 140 ~ 160 °C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150 °C shall be 30 seconds min.
3. Heating shall be fixed at 200 °C for 50 ~ 60 seconds and at 230±10 °C peak.

