



TAI-SAW TECHNOLOGY CO., LTD.

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

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Product Specifications Approval Sheet

Product Description: Crystal Unit Glass 8.0x4.5 16.9344MHz

TST Part No.: TZ2330A

Customer Part No.: _____

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

Checked by: _____ Ginger Huang *Ginger Huang*

Approved by: _____ Kelly Huang *Kelly Huang*

Date: _____ 08/24/2011

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.



TAI-SAW TECHNOLOGY CO., LTD.
Glass SMD 8.0x4.5 16.9344MHz Crystal Unit

MODEL NO.: TZ2330A

REV. NO.: 1.0

Revise:

Rev.	Rev. Page	Rev. Account	Date	Ref. No.	Reviser
1	N/A	Initial release	08/24/11'	N/A	Ginger Huang



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Glass SMD 8.0x4.5 16.9344MHz Crystal Unit

MODEL NO.: TZ2330A

REV. NO.: 1.0

Features:

- Surface Mount Seam Weld Package
- Excellent Reliability Performance
- Good Frequency Perturbation and Stability over temperature



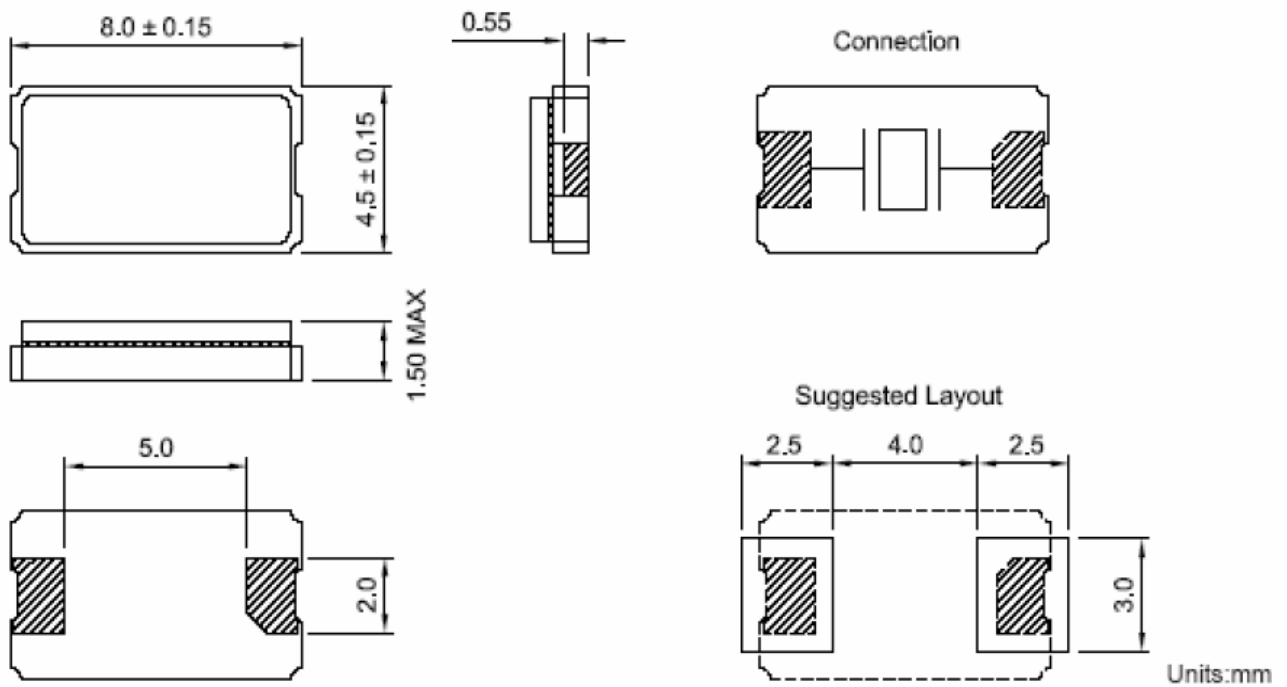
Description and Applications:

Surface mount 8.0mmx4.5mm crystal unit for use in wireless telecommunications devices.

Electrical Specifications:

TZ2330A	Specification
Nominal Frequency	16.934400 MHz
Mode of Oscillation	Fundamental
Storage Temperature Range	-40°C to +85°C
Operating Temperature Range	-20°C to +70°C
Frequency Stability over Operating Temperature Range	+/- 50 ppm (referred to the value at 25°C)
Frequency Make Tolerance (FL)	+/- 50 ppm @ 25°C +/- 3°C
Equivalent Series Resistance (ESR)	50 Ω max
Shunt Capacitance (Co)	7.0 pF MAX
Drive Level	10 uW Max
Load Capacitance (CL)	8 pF
Aging @ 25°C per year	+/-5.0 ppm max
Insulation Resistance	500 MΩ min./DC 100V
Marking	Laser marking

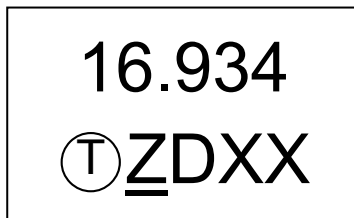
Mechanical Dimensions (mm):



Marking:

Line 1: Frequency (16.934)

Line 2: TST Logo + Crystal Product Code + Date Code + Traceability Code (XX)



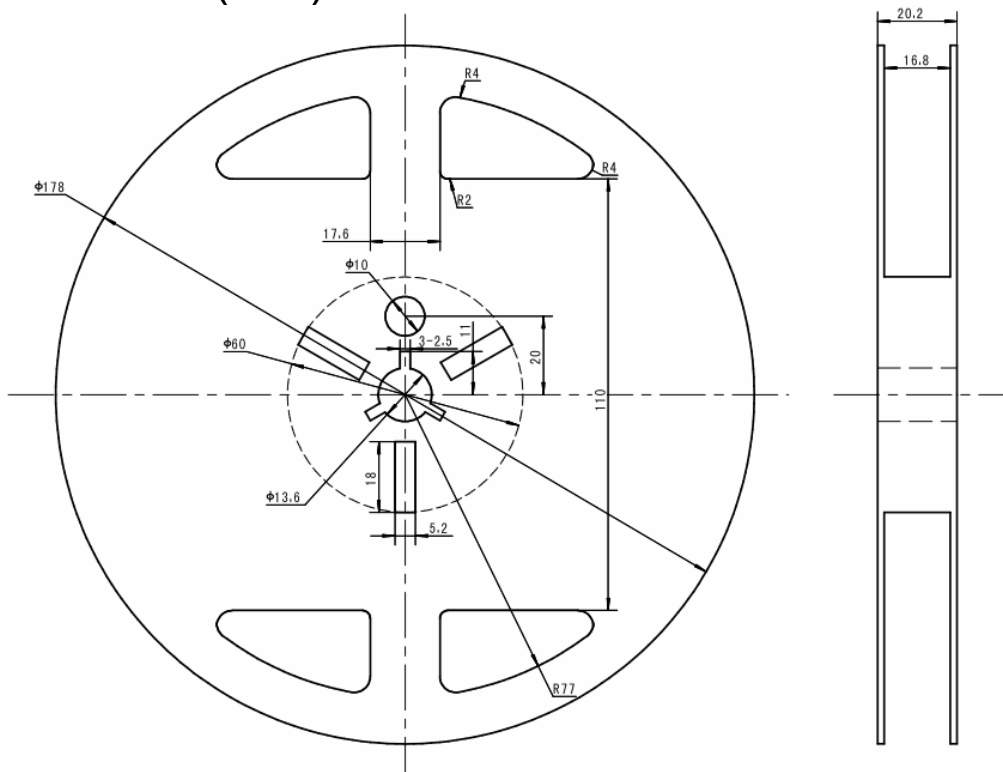
Product Code Table

Year	2008	2009	2010	2011
	2012	2013	2014	2015
Product code	z	Z	z	Z

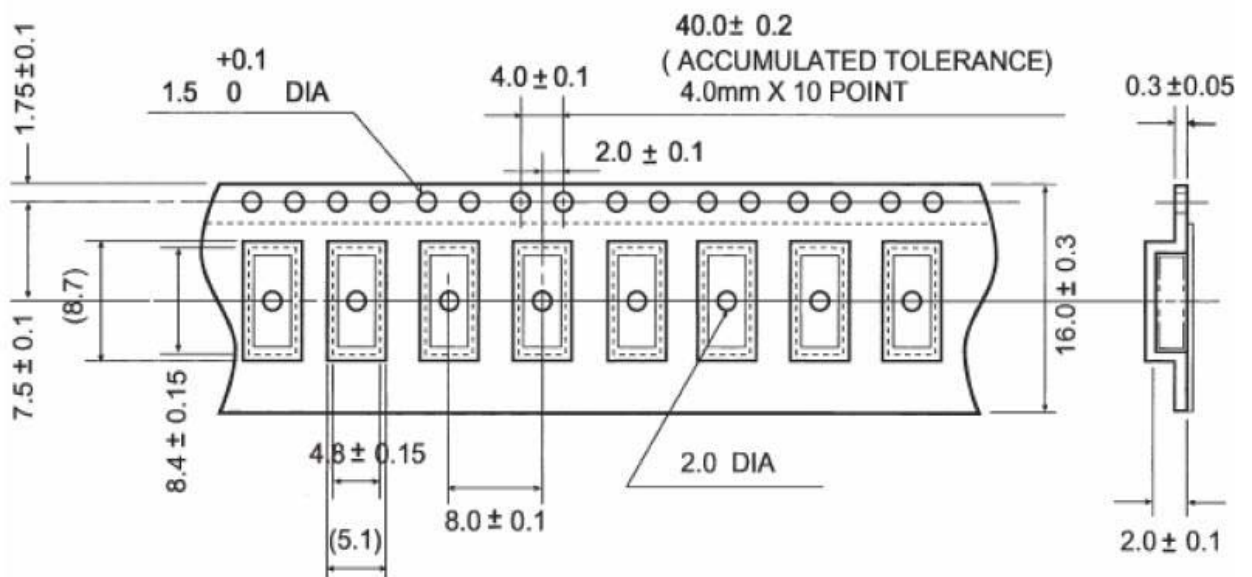
Date Code Table

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): 1k/reel



Tape Dimensions (mm):



Reflow Profile:

