



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: 11/14/2007

Product Name: HC49-SMD 12.000MHz Crystal Resonator

TST Part No.: TZ0515A

Customer Part No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Quinton Lo

Approved by: _____ Robert Chang

Date: _____ 11/14/2007



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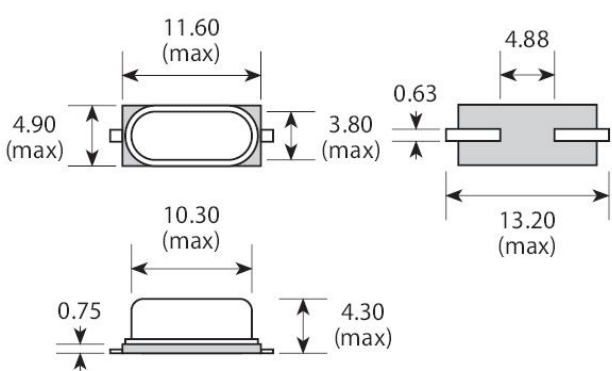
12.000MHz Crystal Resonator

MODEL NO.: TZ0515A

REV. NO.: 2.0

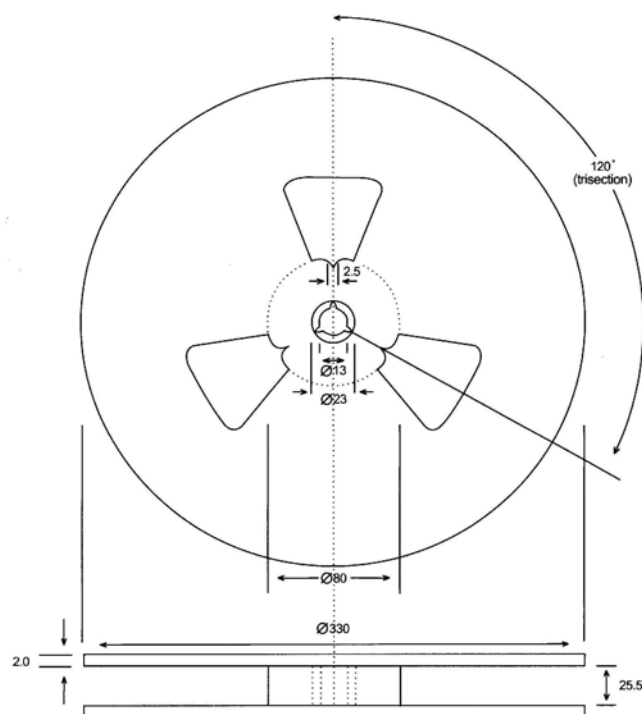
Electrical Specifications:

	Specification
Nominal Frequency	12.000 MHz
Mode of Vibration	Fundamental
Storage Temperature Range	-40°C to +85°C
Operating Temperature Range	-10°C to +60°C
Frequency Stability over Operating Temperature	+/-50 ppm
Frequency Make Tolerance	+/-30 ppm @ 25°C +/- 3°C
Max. Value of the Series Resistor	50Ω max.
Drive Level	100uW nominal
Load Capacitance-CL	16 pF
Aging	+/-3.0 ppm/year @25°C
Marking	Laser marking
Insulation Resistance	500M Ω min at DC 100V

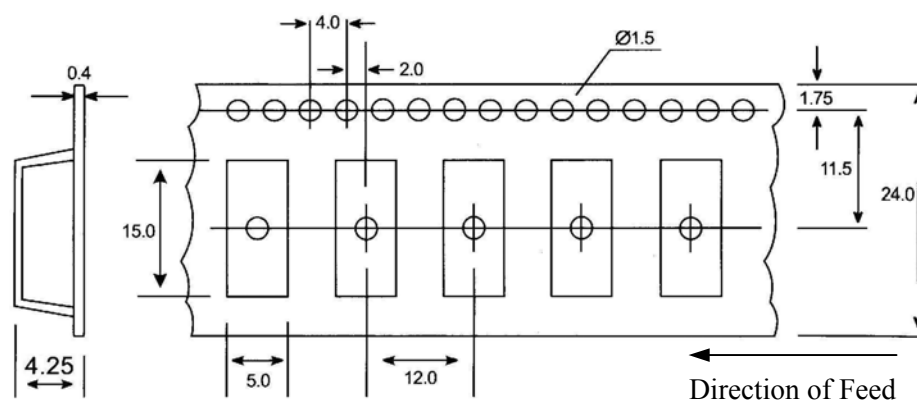
Mechanical Dimensions (mm):	Marking:
	12.0000 515T ZD “Z” stand for product code and “D” for date code

PACKING:

1. REEL DIMENSION (Unit: mm)



2. TAPE DIMENSION (Unit: mm)



Product Code Table

Year	2001 2005	2002 2006	2003 2007	2004 2008
Product Code	Z	z	<u>Z</u>	<u>z</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

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TST DCC

Release document