

SPECIFICATION FOR APPROVAL

CUSTOMER : _____
PRODUCT TYPE : SMD SEAM SEALING X'TAL 3.2*2.5
NOMINAL FREQ. : 26.000000MHz
TXC P/N : 7M26000172
REVISION : S1
CUSTOMER P/N : _____
PM / SALES : _____
DATE : _____
CUSTOMER SIGNATURE & Date

- (1) TXC requires one copy returned with signature and title of authorized individual that signifies acceptance of the attached specifications.
- (2) Orders received and accepted by TXC after return of signed copy of specification will be produced per these specifications.
- (3) Any changes to these specifications must be agreed upon by both parties and new revision of the Product Specification Sheet will be issued.
- (4) Any issuance of purchase order prior to consigning back the Approval page of "Specification Sheets" from customers will be regarded as the agreement on the contents of these specifications.

Attachment: Product Specification Sheet

1
2
3
4
5

RoHS Compliant

PRODUCT SPECIFICATION SHEET

PRODUCT TYPE : SMD SEAM SEALING X'TAL 3.2*2.5
NOMINAL FREQ. : 26.000000MHz
TXC P/N : 7M26000172
REVISION : S1

PE/RD	QA	MFG
<i>Scott Chen</i>		
27-Sep-05		

NOTE:

- (1)Lead Free Products are "Directive 2002/95/EC of The European Parliament of 27 January 2003 on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment" Compliant (Attachment: SGS Test Report).
- (2)Revision "Sx" is for engineering samples only. PE/RD's approval required.
- (3)Revision "Ax" is production ready. PE, QA and MFG's approval required

RoHS Compliant

<u>Rev</u>	<u>Revise page</u>	<u>Revise contents</u>	<u>Date</u>	<u>Ref.No.</u>	<u>Reviser</u>	<u>Page</u>	<u>Ver.</u>
S1	N/A	Initially revised	27-Sep-05	N/A	Sharon Miao	1	S1
						2	S1
						3	S1
						4	S1
						5	S1
						6	S1

ELECTRICAL SPECIFICATIONS**Standard atmospheric conditions**

Unless otherwise specified, the standard range of atmospheric conditions for making measurement and tests are as follow:

Ambient temperature : 22±5
Relative humidity : 40%~70%

If there is any doubt about the results, measurement shall be made within the following limits:

Ambient temperature : 22±1
Relative humidity : 40%~70%

Measure equipment

Electrical characteristics measured by HP E5100A or equivalent.

Crystal cutting type

The crystal is using AT CUT (thickness shear mode).

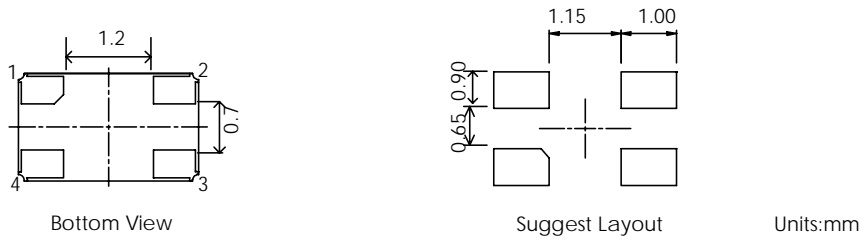
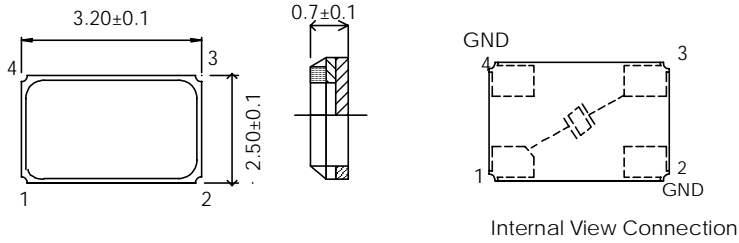
Unit Weight:

0.018±0.001 g/pcs

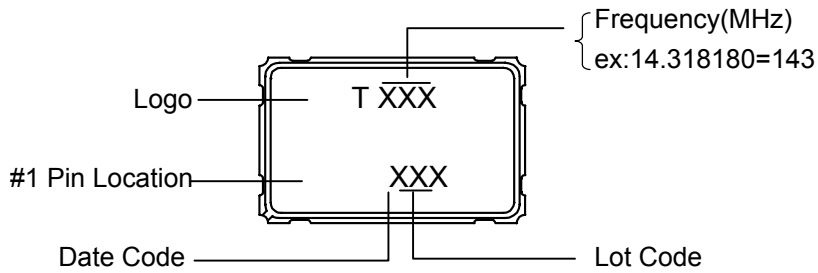
	Parameters	SYM.	Electrical Spec.				Notes
			MIN	TYPE	MAX	UNITS	
1	Nominal Frequency	FL	26.000000			MHz	-
2	Oscillation Mode	-	Fundamental			-	-
3	Load Capacitance	CL	12			pF	-
4	Frequency Tolerance	-	±10			ppm	at 25 ± 3
5	Frequency Tolerance	-	±10			ppm	Over Operating Temp. Range (Reference 25)
6	Operating Temperature	-	-20	~	70		-
7	Aging	-	±1			ppm	1st Year
8	Drive Level	DL	-	100	-	uW	-
9	Effective Resistance Rr	Rr	-	-	25	Ω	-
10	Shunt Capacitance C0	C0	-	-	3	pF	-
11	Motional Capacitance C1	C1	-	-	NA	fF	-
12	Insulation Resistance	-	500	-	-	MΩ	at DC 100V
13	Storage Temperature Range	-	-40	~	85		-

DIMENSIONS

- 1. Crystal enclosure seal : Seam Weld
- 2. Crystal enclosure medium : Vacuum



MARKING



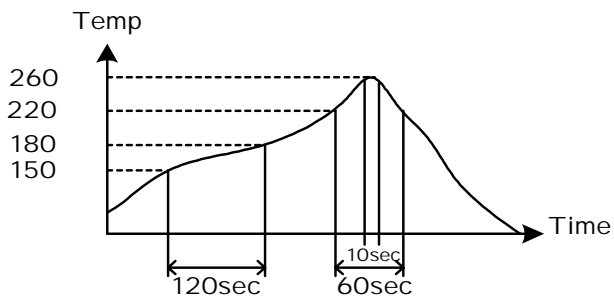
Date Code

YEAR \ MONTH					JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
					A	B	C	D	E	F	G	H	J	K	L	M
2001	2005	2009	2013	2017	N	P	Q	R	S	T	U	V	W	X	Y	Z
2002	2006	2010	2014	2018	a	b	c	d	e	f	g	h	j	k	l	m
2003	2007	2011	2015	2019	n	p	q	r	s	t	u	v	w	x	y	z
2004	2008	2012	2016	2020												

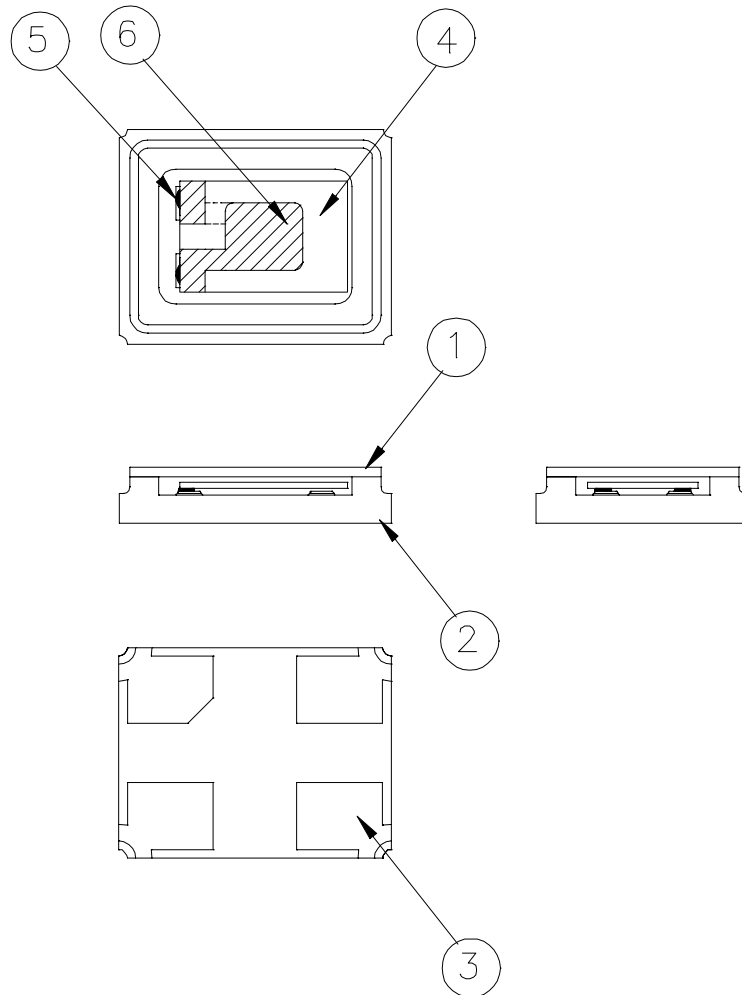
This date code will be cycled every four years

SUGGESTED REFLOW PROFILE

- Total time : 200 sec. Max.
- Solder melting point :220

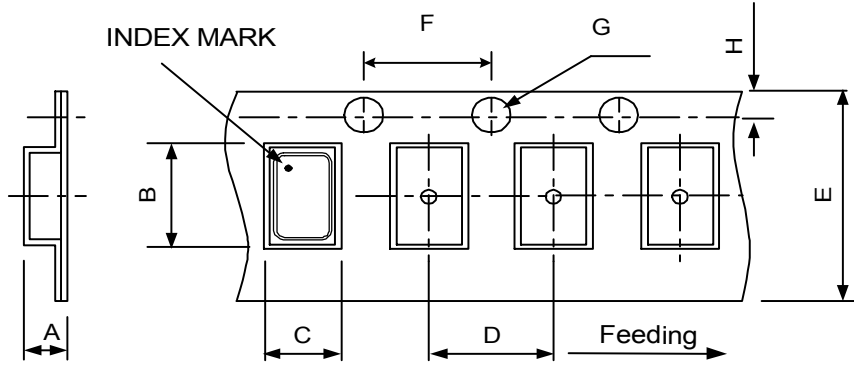


STRUCTURE ILLUSTRATION



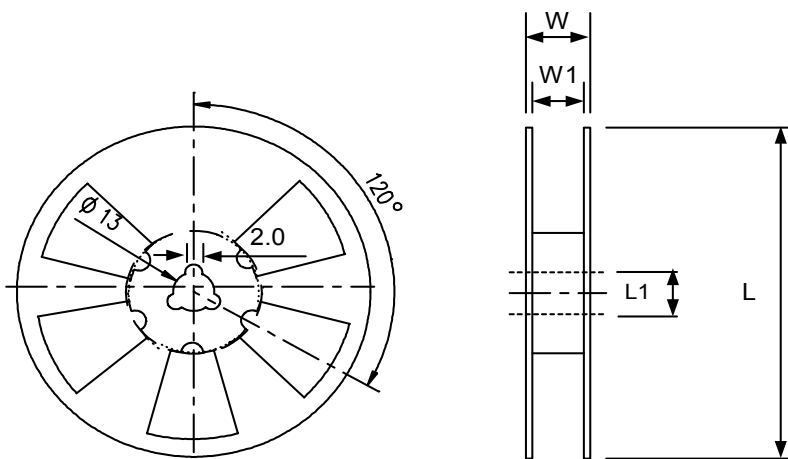
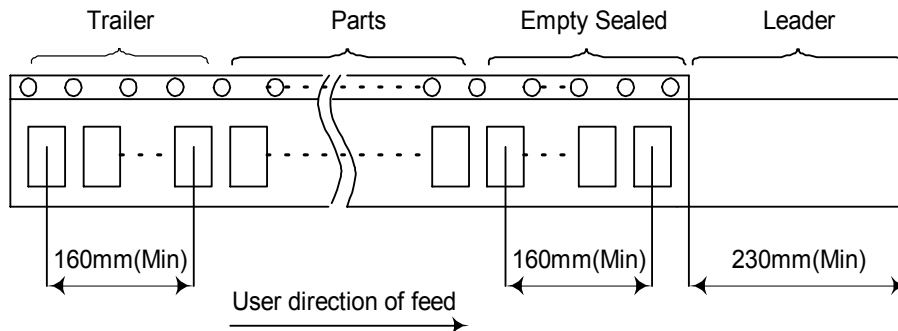
NO	COMPONENTS	MATERIALS	QTY	FINISH/SPECIFICATIONS
1	Lid	Metal (Fe)	1	-
2	Base(Package)	Ceramic	1	Color black
3	PAD	Au	4	Tungsten metalize + Ni plating + Au plating
4	Crystal blank	SiO2	1	-
5	Conductive adhesive	Ag	4	Epoxy resin
6	Electrode	Au + Cr	2	-

PACKING : (EIA-481-2)



DIMENSIONS	A	B	C	D	E	F	G	H	(UNIT : mm)
	1.40	3.40	2.70	4.00	8.00	4.00	1.50	1.75	

REMARK :



DIMENSIONS	L	L1	W	W1	pcs / Reel (UNIT : mm)
	178	13	11.5	8	Standard Reel Quantity is 3,000 pcs per reel

RELIABILITY SPECIFICATIONS

No.	Test Item	Test Methods	REF.DOC
1	Drop Test	150 cm height, fall freely onto stainless plate 3 times.	
2	Mechanical Shock	Device are shocked to half sine wave (1000 G) three mutually perpendicular axes each 3 times. 0.5m sec. duration time	
3	Vibration	Frequency range 10 ~ 2000 Hz Amplitude 1.52 mm Sweep time 20 minute Ppendicular axes each test time 4 hours (Total test time 12 hours)	MIL-STD-883E
4	Solderability	Temperature 240 ± 5 Immersing depth 0.5 mm minimum Immersion time 5 ± 0.5 seconds Flux Rosin resin methyl alcohol solvent (1 : 4)	MIL-STD-883E
5	Resistance To Soldering Heat	Pre-heat temperature 125 Pre-heat time 60 ~ 120 sec. Test temperature 260 ± 5 Test time 10 ± 1 sec.	MIL-STD-202F
6	High Temp. Storage	+ 125 ± 3 for 1000 ± 12 hours	JIS C 0021
7	Low Temp. Storage	- 40 ± 3 for 1000 ± 12 hours	JIS C 0020
8	Thermal Cycles	Total 100 cycles of the following temperature cycle 