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TCXO SMD 2.5x2.0 26.000MHz

MODEL NO.: TX0395B REV. NO.: 5

Features:

- Ultra Miniature SMD Package
- Good Frequency Stability
- Good Phase Noise Response
- Compliant with AEC-Q200

RoHS Compliant
Lead free
Lead-free soldering

Description and Applications:

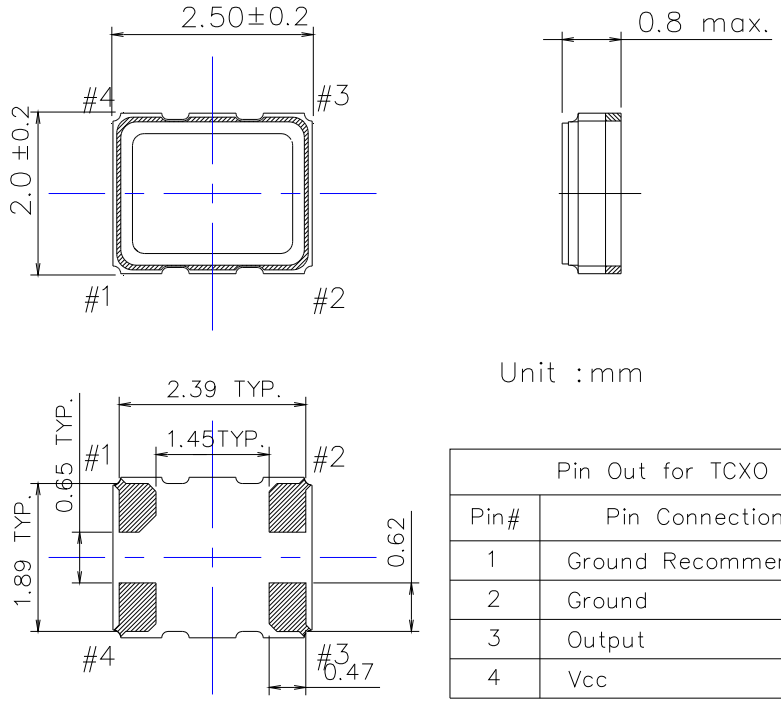
Surface mount 2.5mmx2.0mm TCXO for use in wireless communications devices

Electrical Specifications:

TX0395B	**Specifications**
Nominal Frequency, Fo	26.000 MHz
Storage Temperature Range	-40°C to +85°C
Operating Temperature Range	-40°C to +85°C
Power Supply Voltage, Vcc	1.7~3.3V (Reference to 2.8V)
Output Voltage with Load 10pF//10KΩ, Vout	0.8 Vp-p min
Output Waveform	Clipped Sinewave
Output Load	10pF//10KΩ
Power Supply Current, Icc	1.5 mA max
Frequency Tolerance as received	+/- 1.0 ppm max @ 25°C +/- 3°C
Frequency Tolerance after reflow	+/- 2.0 ppm max @ 25°C +/- 3°C
Frequency Stability a. Vs. Temperature (-30~85°C) Vs. Temperature (-40~-30°C) b. Vs. Load varied 10pF//10KΩ+/-5% c. Vs. Supply Voltage varied 2.8V+/-5%	 +/- 0.5 ppm reference to the middle point betwe minimum and maximum frequency value +/- 3.0 ppm +/- 0.1 ppm +/- 0.1 ppm
Frequency slope (Minimum of one measurement every 2°C)	+/-0.05ppm/°C@-20°C~+65°C +/-0.1ppm/°C@-30°C~+85°C +/-0.35ppm/°C@-40°C~+-30°C
Static temperature hysteresis	+/- 0.6 ppm max.

Start Up Time (90% of final RF level in Vp-p) (Within ± 0.5 ppm of final freq)	2.0 msec max.
Harmonics	-8.0 dBc max
Aging	+/-1.0 ppm/year max @25°C first year +/-1.5 ppm/year max @25°C 2nd year +/-2.5 ppm/year max @25°C 5 years +/-5.0 ppm/year max @25°C 10 years
SSB Phase Noise (@1Hz Carrier Offset) (@10Hz Carrier Offset) (@100Hz Carrier Offset) (@1KHz Carrier Offset) (@10KHz Carrier Offset) (@100KHz Carrier Offset)	-50 dBc/Hz max -80 dBc/Hz max -105 dBc/Hz max -130 dBc/Hz max -148 dBc/Hz max -150 dBc/Hz max

Mechanical Dimensions (mm):

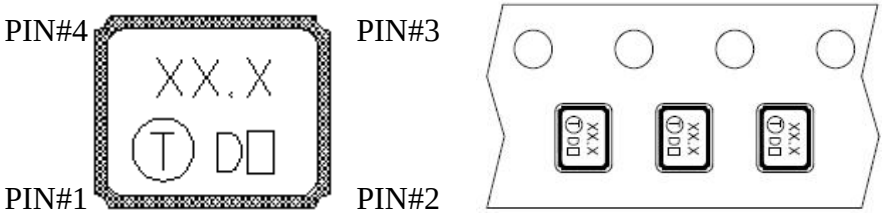


Pin Out for TCXO	
Pin#	Pin Connections
1	Ground Recommended
2	Ground
3	Output
4	Vcc

Marking:

Line 1: Frequency (26.0)

Line 2: TST Logo + Date Code + Product Code (D is Date code or Year code □ is TST internal tracking code, could be Product number code)



Date Code Table

Date Code:

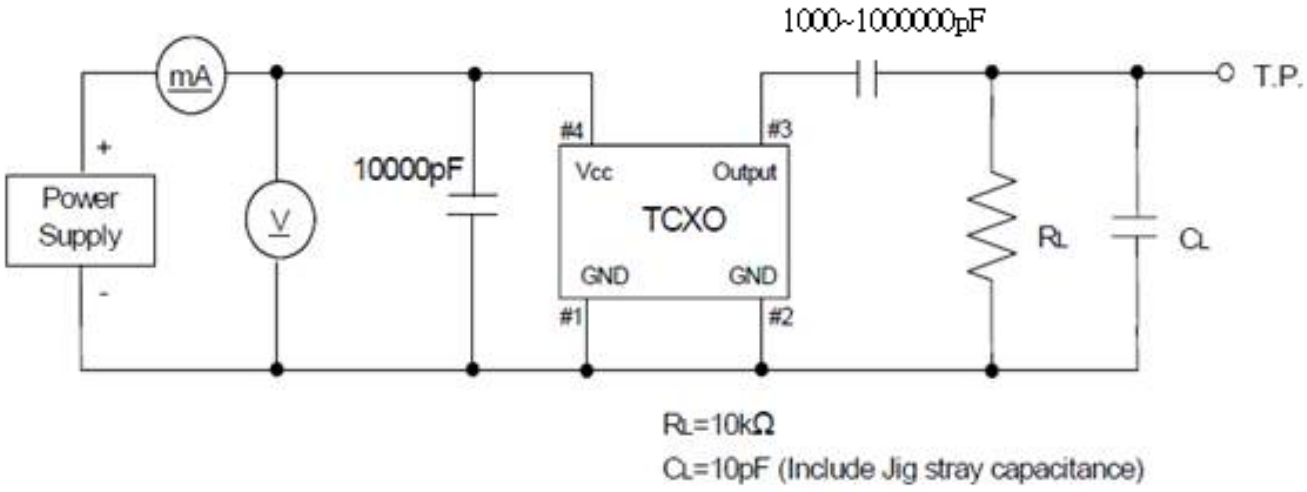
YEAR \ MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2013 2017 2021 2025 2029	A	B	C	D	E	F	G	H	J	K	L	M
2014 2018 2022 2026 2030	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015 2019 2023 2027 2031	a	b	c	d	e	f	g	h	j	k	l	m
2016 2020 2024 2028 2032	n	p	q	r	s	t	u	v	w	x	y	z

*This date code will be cycled every four years.

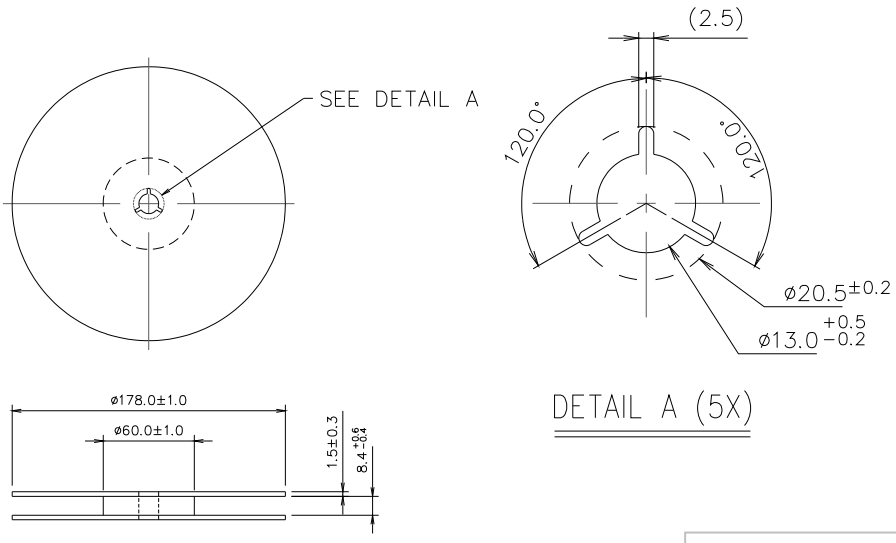
Product Code Table: (Under line With Even Year and Odd Year for Nothing)

Year						Product Code
2013	2015	2017	2019	2021	2023	□
2014	2016	2018	2020	2022	2024	□

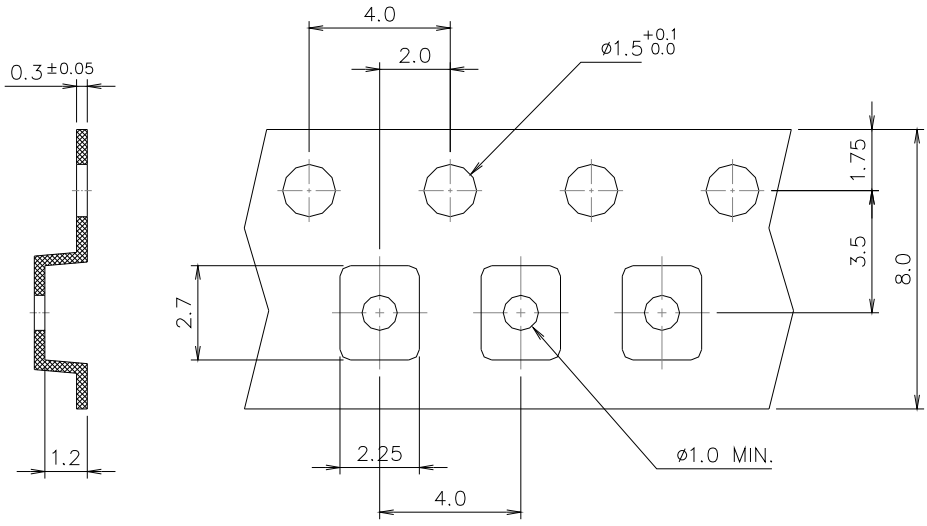
Recommended Circuit



Reel Dimension

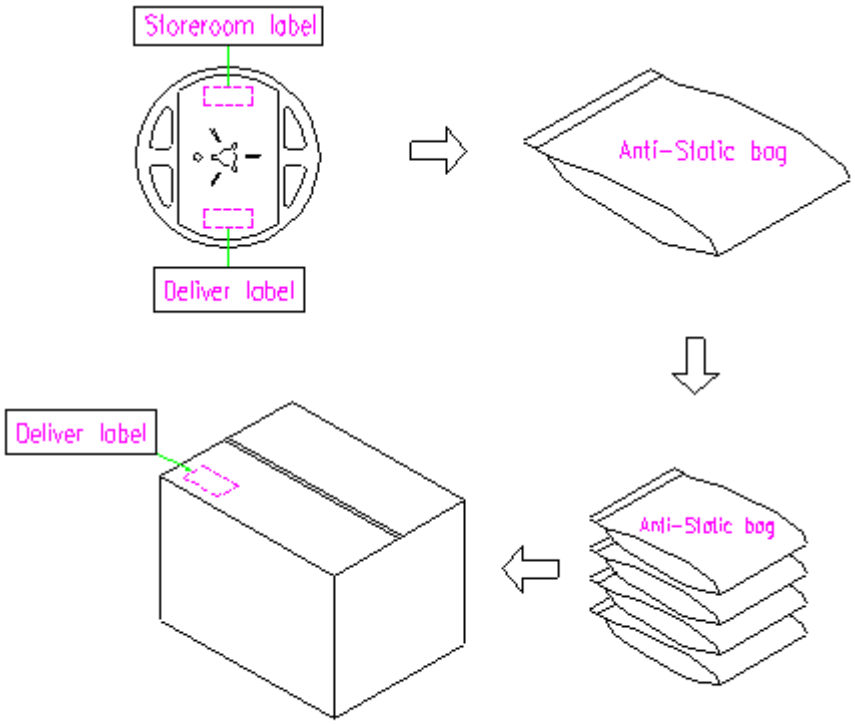


Tape Dimension

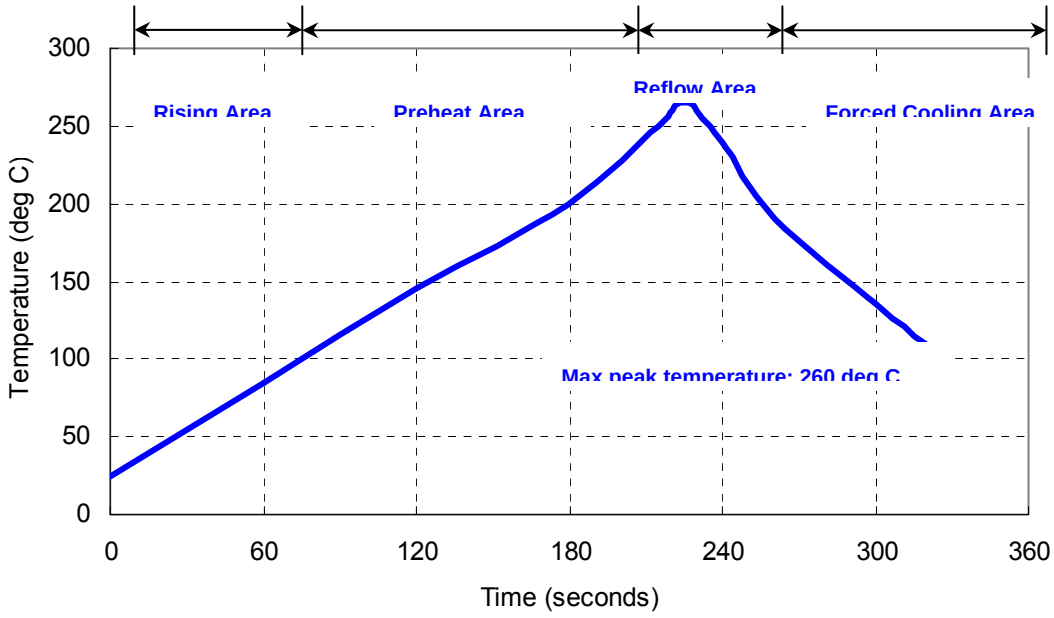


Packing Quantity/Packing:

3K pcs maximum per reel



Reflow Profile:



Notes of the Usage:

1. Touch the solder iron at 260+/-5 deg C onto the leads for 10+/-2 sec max or touch the solder at 350+/-5 deg C onto the leads for 3+/-0.5 sec.
2. In the customer's reflow process, if it will remain some mechanical stress at the soldering terminals, also make some cracks on the soldering termination. Some cracks will cause open or short circuit and cause of thermal increasing or smoking. Don't make any excess mechanical stress to soldering points.
3. In case of giving a heavy shock to the products, it may make an open or short circuit and cause of thermal increasing and smoking. To avoid heavy shock impact applying to products is strictly required.

Notes of the Storage:

1. To keep products under the condition at the room temperature (-5~35 deg C) with normal humidity (45~75%). Absorption of moisture and dewdrop may make inferiority of characteristics and a short circuit.
2. Oxidization of terminals shall make the solderability more inferior. Dusts and corrosive gas will make a cause of the open or short circuit. Keep it in the clean place where is not in dusty and no corrosive gas.
3. Use the unti-static material to the storage package.

4. Don’t put any excess weight to the TCXO in the storage process.
5. Don’t move the product from the cold place to the hot place in the short time, otherwise it may make some dew-drop, then a short circuit may happen in case.
6. Storage periods should be maximum 6 months under condition of above item 1 after delivery from TST factory.
7. Once open the bag, there is possibility of electrical characteristics deterioration due to absorption of moisture. So, please use parts within 7 days after opening the bag.
8. If you have to keep parts without using after opening the bag, please put the drying agent in the bag, fold the bag and keep it in the place where temperature and humidity are controlled (nitrogen atmosphere box etc.)