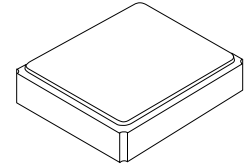


XVT9030

**16.368 MHz
VCTCXO**



SM5032-4 Case

- **Excellent Frequency Stability & Low Phase Noise**
- **5.0 x 3.2 x 1.6 mm Surface-mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**
- **AEC-Q200 Qualified**
- **Moisture Sensitivity Level: 1**

Electrical Characteristics

XVT9030	Specifications
Nominal Frequency, Fo	16.368000 MHz
Storage Temperature Range	-55°C to +125°C
Operating Temperature Range	-40°C to +85°C
Power Supply Voltage, VDD	3.3 V +/- 5%
Power Supply Current, IDD	6.0 mA max
Control Voltage, Vcon	1.5 +/- 1.0 V
Frequency Tolerance (Vcon=1.5V) after reflow	+/- 2.0 ppm @ 25°C +/- 3°C
Frequency Stability	
a. Vs. Temperature (-40~85°C)	+/- 0.5 ppm reference to 25°C
b. Vs. Load varied 15PF+/-10%	+/- 0.2 ppm
c. Vs. Supply Voltage varied Vdd+/-5%	+/- 0.3 ppm
Vcon Frequency Control Range (1.5+/-1.0 V)	+/-7 ppm min
Vcon Input Impedence	100 KOhm min
Output Waveform	CMOS
Load	15pF
“0” Level	0.33V max
“1” Level	2.97V min
Rise Time (10% -> 90% of final RF level in Vp-p)	6.0 nsec max.
Fall Time (90% -> 10% of final RF level in Vp-p)	6.0 nsec max.
Duty Cycle	45% ~ 55%
Start Up Time	2.0 msec max.

G Sensitivity 3 axes random vibration 20Hz to 2kHz	2.5 ppb per G max
Root Allan Variance (Tau = 1s)	+/- 1x10 ⁻⁹ max
SSB Phase Noise (@10Hz Carrier Offset) (@100Hz Carrier Offset) (@1KHz Carrier Offset) (@10KHz Carrier Offset) (@100KHz Carrier Offset)	- 93 dBc/Hz typ -118 dBc/Hz typ -138 dBc/Hz typ -153 dBc/Hz typ -155 dBc/Hz typ
Aging	+/-1.0 ppm / year @ 25°C



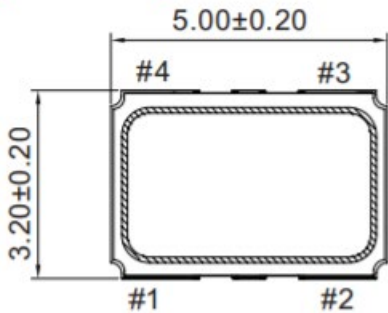
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

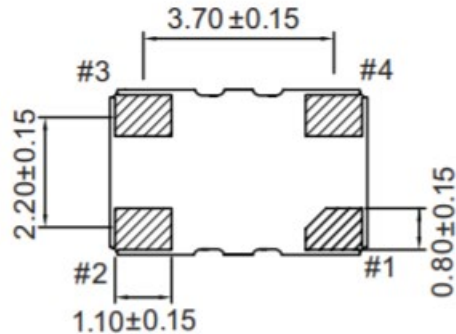
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Mechanical Dimensions (mm):

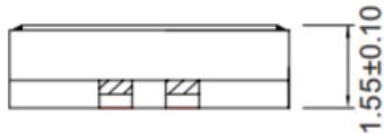
[TOP VIEW]



[BOTTOM VIEW]



[SIDE VIEW]

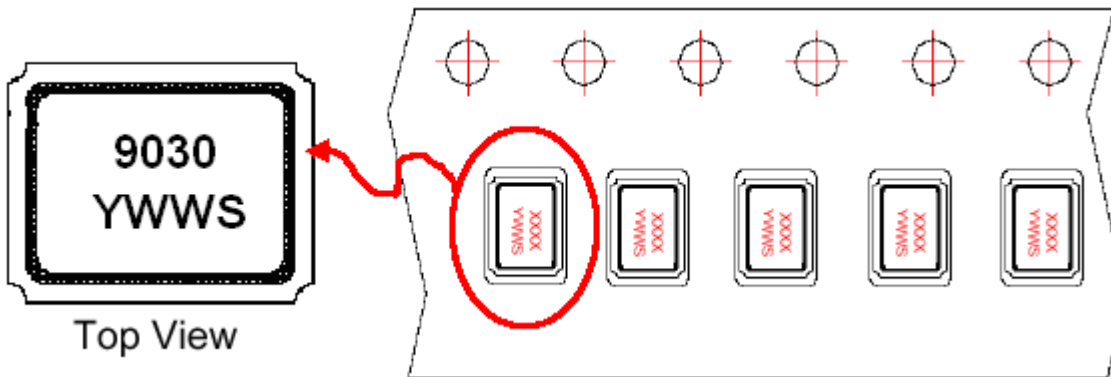


Pin#	Function
1	Vcon:VC-TCXO GND/NC:TCXO
2	GND
3	OUTPUT
4	VDD

Marking:

Line 1: 9030

Line 2: YWWS (Y=9 for 2019, WW=30 for week30, S=A for C shift)

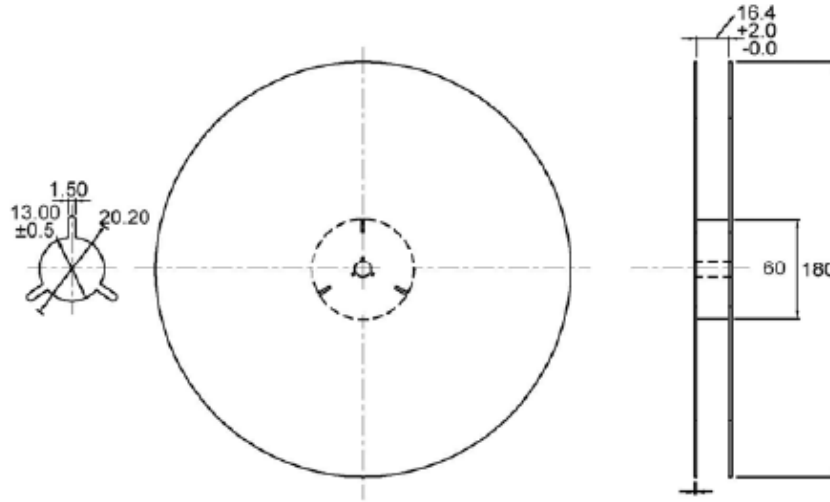


Packing:

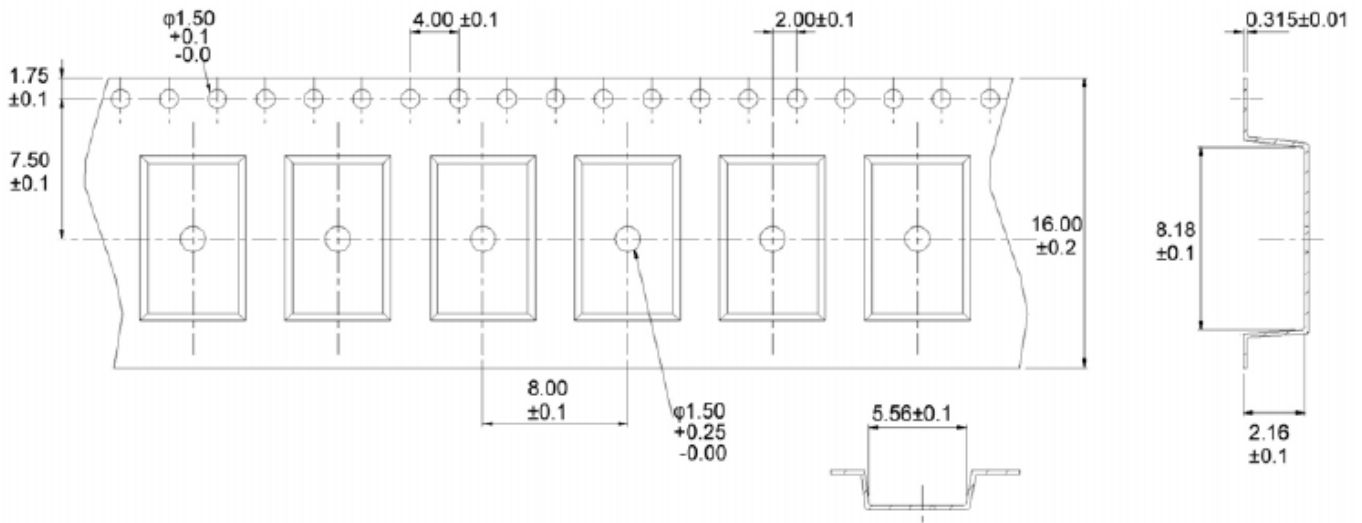
Reel Dimension

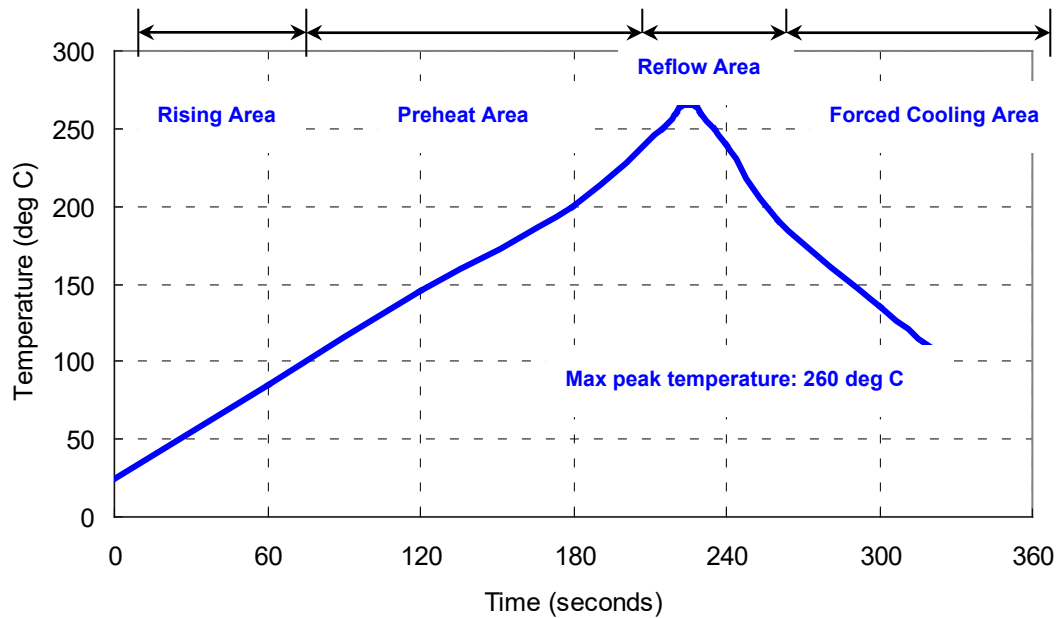
Reel Count:
7" = 3000

Tape and Reel Standard per ANSI/EIA-481



Tape Dimension





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 ($-5 \sim 35$ 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 anti-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 the 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.

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.)