

RoHS Compliant  
Pb - Lead Free

Ltr	Revisions	Date	Appr

**Electrical Specifications:**

<b>Nominal Frequency</b>	<b>13.000</b>	<b>MHz</b>
	<b>16.3676</b>	
	<b>16.369</b>	
	<b>19.200</b>	
	<b>26.000</b>	
	<b>40.000</b>	
<b>Frequency Stability over Temperature</b>	<b>±2.5</b>	<b>PPM Max</b>
<b>Aging per Year</b>	<b>±1.0</b>	
<b>Operating Temperature Range</b>	<b>-30 to +75</b>	<b>°C</b>
<b>Storage Temperature Range</b>	<b>-40 to +85</b>	
<b>Supply Voltage</b>	<b>+3.0 ± 5%</b>	<b>Vdd</b>
<b>Control Voltage</b>	<b>+0.5 to +2.5</b>	
<b>Frequency Stability vs. Supply Change</b>	<b>±0.2</b>	<b>PPM Max</b>
<b>Frequency Stability vs. Load Change</b>	<b>±0.3</b>	
<b>Frequency Pulling Range</b>	<b>±8.0</b>	<b>PPM Min</b>
<b>Input Current</b>	<b>2.0</b>	<b>mA Max</b>
<b>Output Waveform</b>	<b>Clipped Sinewave</b>	<b>-</b>
<b>Output Level</b>	<b>0.8 p-p</b>	<b>V Min</b>
<b>Output Load</b>	<b>10K // 10 pF</b>	<b>-</b>
<b>Transfer Function</b>	<b>Positive</b>	<b>-</b>



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All dimensions are millimeters.

CAD: TCR

Review: EG

Appr: JL

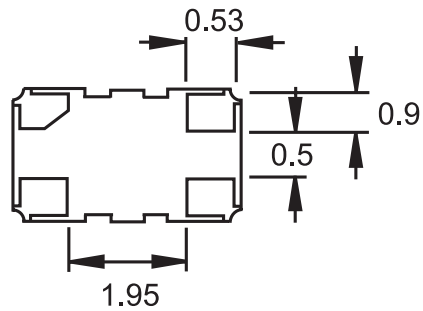
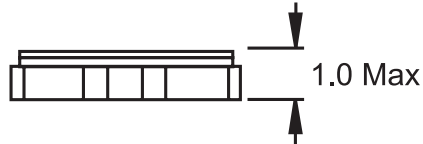
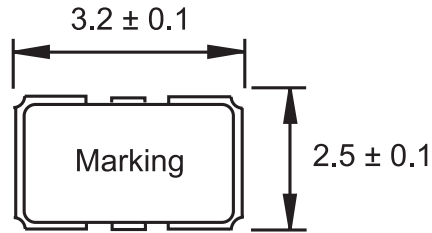
Page: 1/4 Date: July 10, 2006

Specification Title:

**Temperature Compensated  
Voltage Controlled Crystal Oscillator  
TCVCXO - Ceramic Package  
3.2 x 2.5 millimeter Surface Mount**

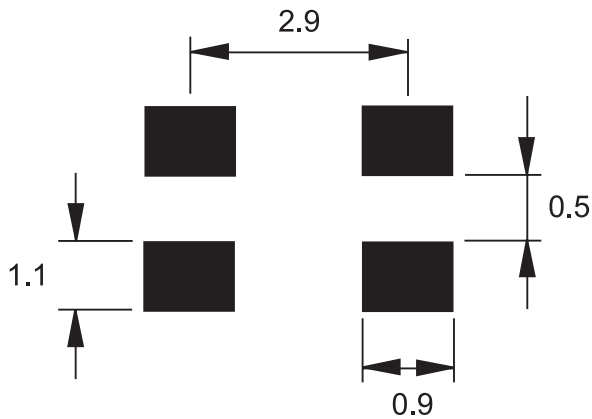
Part Number: **TV32 Series**

### Mechanical Outline:

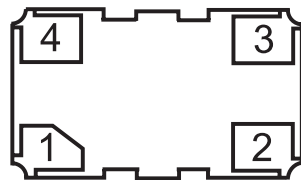


**Package is Ceramic - Metal.  
Dimensions are millimeters.**

### Solder Pad Layout:



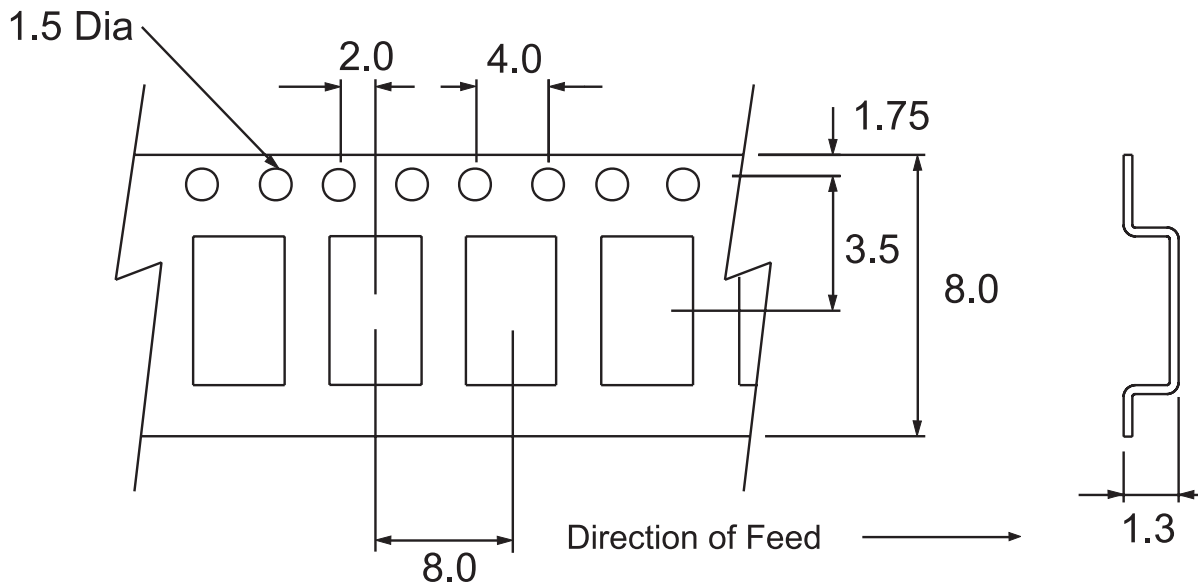
### Pad Connection:



- 1- Control Voltage
- 2- Ground
- 3- Output
- 4- Vcc

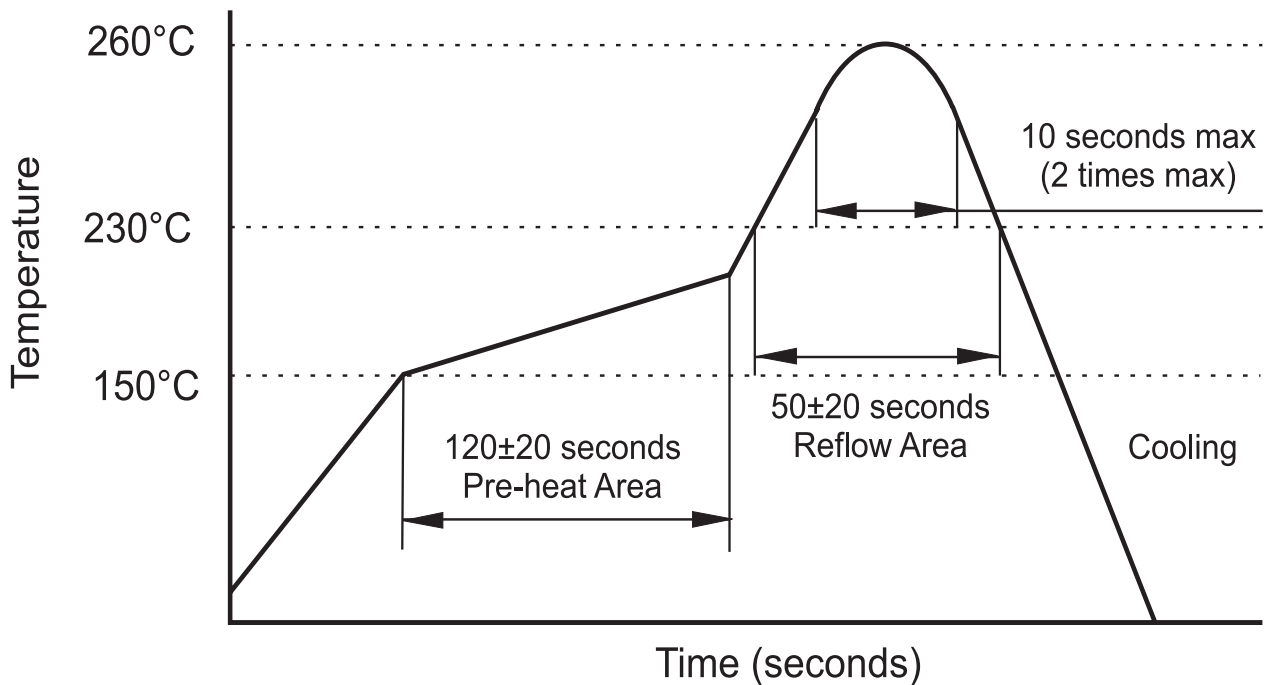
**Top View**

**Carrier Tape Dimensions:**



**Dimensions are millimeters.**

**Solder Reflow Characteristics:**



**How to build a Part Number:**

<b>Series</b>	<b>TV</b>	<b>Parameter</b>
<b>Package</b>	<b>32</b>	<b>3.2 x 2.5 mm</b>
	-	
<b>Supply Voltage</b>	<b>3</b>	<b>+3.0 Vdd ± 5%</b>
<b>Temperature Stability</b>	<b>025</b>	<b>±2.5 PPM</b>
<b>Output Waveform</b>	<b>S</b>	<b>Clipped Sinewave</b>
	-	
<b>Frequency</b>	<b>See Page 1</b>	<b>MHz</b>
	-	
<b>Temperature Range</b>	<b>F1</b>	<b>-30 to +75° C</b>
	-	
<b>Packaging</b>	<b>-</b>	<b>Bulk</b>
	<b>R</b>	<b>Tape and Reel</b>

**Part Number Example:**

**TV32-3025S-19.200-F1-R**

**TV32: 3.2 x 2.5 mm SMD Package**

**3: +3.0 Vdd Supply Voltage**

**025: ±2.5 PPM Temperature Stability**

**S: Clipped Sinewave Output**

**19.200 MHz Nominal Frequency**

**F1: -30 to + 75° C Temperature Range**

**R: Tape and Reel Packaging**

**Notes:**

- 1- Product is shipped in Tape and Reel configuration. Each reel contains 3000 pieces.**
- 2- Quantities less than 1000 are shipped bulk in ESD pouches.**
- 3- Specification subject to change without notice.**