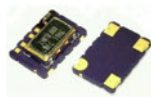


- Miniature 7 x 5 x 2.3mm SMD package
- Wide frequency range: 27.0MHz to 200.0MHz
- Supply voltage 3.3 Volts
- Frequency stability from  $\pm 1$ ppm over  $-30$  to  $+75^\circ\text{C}$
- RoHS compliant



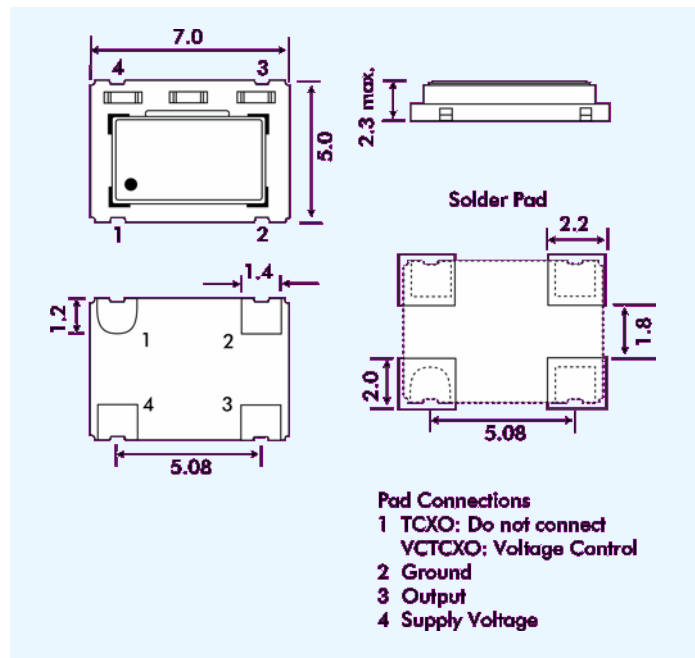
### DESCRIPTION

EMV572T series TCXOs are packaged in a miniature 4 pad ceramic SMD package. With squarewave (CMOS) output, tolerances are available from  $\pm 1.0$ ppm over  $-30^\circ$  to  $+75^\circ\text{C}$ . The part has a 0.01 $\mu\text{F}$  decoupling capacitor built in.

### SPECIFICATION

Product Series Code	TCXO:	EMV572T
	VCTCXO:	VEMV572T
Frequency Range:	27.0MHz to 200.0MHz	
Output Waveform:	Squarewave, HCMOS	
Initial Calibration Tolerance:	$< \pm 2.0$ ppm at $+25^\circ \pm 2^\circ\text{C}$	
Standard Frequencies:	30.0, 32.768, 38.880, 40.0, 50.0, 54.0, 64.0, 65.536, 77.76, 80.0, 128.0, 160.0 and 200.0MHz <i>(Partial list)</i>	
Operating Temperature Range:	<i>See table</i>	
Frequency Stability		
vs. Ageing:	$\pm 1.0$ ppm max. first year	
vs. Voltage Change:	$\pm 0.3$ ppm max. $\pm 5\%$ change	
vs. Load Change:	$\pm 0.3$ ppm max. $\pm 10\%$ change	
vs. Reflow (SMD type):	$\pm 1.0$ ppm max. for one reflow <i>(Measured after 24 hours)</i>	
Supply Voltage:	+3.3 Volts	
Output Logic Levels:	Logic High: 90% Vdd min. Logic Low: 10% Vdd max.	
Current Consumption:	40mA maximum	
Rise and Fall Times:	10ns typical	
Duty Cycle:	50% $\pm 10\%$ standard,	
Start-up Time:	5ms typical, 10ms max.	
Current Consumption:	<i>See table below</i>	
Output Load:	15pF	
Storage Temperature:	$-55 \sim +125^\circ\text{C}$	

### EMV57T - OUTLINES AND DIMENSIONS



### FREQUENCY STABILITY

Stability (ppm)		$\pm 0.5$	$\pm 1.0$	$\pm 1.5$	$\pm 2.0$	$\pm 2.5$	$\pm 3.0$
Temp. Range ( $^\circ\text{C}$ )	0 ~ +50	✓	✓	✓	✓	✓	✓
	-10 ~ +60	ASK	✓	✓	✓	✓	✓
	-20 ~ +70	X	✓	✓	✓	✓	✓
	-30 ~ +75	X	✓	✓	✓	✓	✓
	-40 ~ +85	X	X	X	ASK	ASK	✓

✓ = available, x = not available, ASK = call Technical Sales

### VEMV572T VOLTAGE CONTROL SPECIFICATION

Control Voltage:	Standard = $+1.5 \pm 1.0$ Volts for all input voltages. <i>(Contact technical sales if <math>+2.5 \pm 2.0</math> Volts is required.)</i>
Frequency Deviation:	$\pm 6.0$ ppm min. (Vcon = $+4.5 \pm 1.0$ V)
Slope Polarity:	Positive <i>(increase of control voltage increases output frequency.)</i>
Input Impedance:	2M $\Omega$ minimum
Modulation Bandwidth:	25kHz minimum

### SSB PHASE NOISE at 25 $^\circ\text{C}$

Offset		10Hz	100Hz	1kHz	10kHz	100kHz
Part = EMV57T33	at 77.760Mhz (dBc/Hz)	-80	-110	-135	-130	-132
	at 155.520Mhz (dBc/Hz)	-80	-110	-125	-120	-125

### PART NUMBERING SCHEDULE

