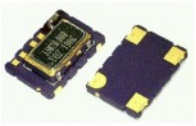
EUROQUARTZ

EM572T TCXO

CMOS 7 x 5 x 2.3mm SMD, MHz Range 1.25MHz to 156.0MHz

- **Miniature 7 x 5 x 2.3mm SMD package**
- **Wide frequency range: 1.25MHz to 156.0MHz**
- **Supply voltage 2.8, 3.0, 3.3 or 5.0 Volts**
- **Frequency stability from ±1ppm over -30 to +75°C**
- **RoHS compliant**



DESCRIPTION

EM572T series TCXOs are packaged in a miniature 4 pad ceramic SMD package. With squarewave (CMOS) output, tolerances are available from ±1.0ppm over -30° to +75°C. The part has a 0.01µF decoupling capacitor built in.

SPECIFICATION

Product Series Code	
TCXO:	EM572T (EML572T >40MHz)
VCTCXO:	VEM572T (VEML572T >40MHz)
Frequency Range:	1.25MHz to 156.0MHz
Output Waveform:	Squarewave, HCMOS
Initial Calibration Tolerance:	<±2.0ppm at +25°±2°C
Standard Frequencies:	10.0, 12.8, 13.0, 14.4, 15.36, 16.384, 19.2, 19.440, 19.68, 25.0, 20.0, 27.0, 38.880, 40.0, 77.760, 125.0, 155.520 (*Partial list*)
Operating Temperature Range:	*See table*
Frequency Stability	
vs. Ageing:	±1.0 ppm max. first year
vs. Voltage Change:	±0.2 ppm max. ±5% change
vs. Load Change:	±0.2 ppm max. ±10% change
vs. Reflow (SMD type):	±1.0ppm max. for one reflow (*Measured after 24 hours*)
Supply Voltage:	+2.8, +3.0, +3.3 or +5.0V (*See table*)
Output Logic Levels:	Logic High: 90% Vdd min. Logic Low: 10% Vdd max.
Rise and Fall Times:	10ns max.
Duty Cycle:	50%±10% standard, 50%±5% option
Start-up Time:	10ms max.
Current Consumption:	*See table below*
Output Load:	15pF
Storage Temperature:	-55~+125°C

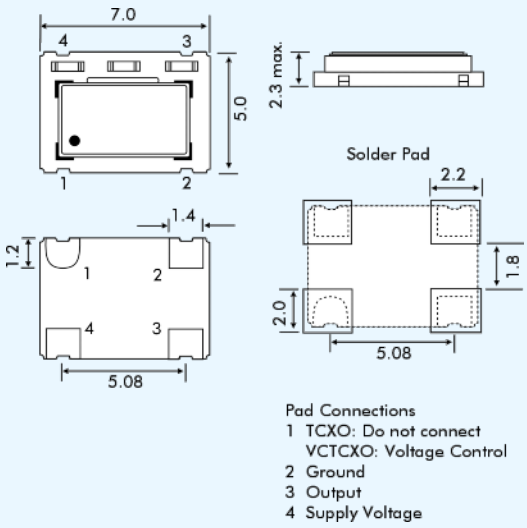
INPUT VOLTAGE & CURRENT CONSUMPTION

Input Voltage/ Frequency	+2.8V	+3.0	+3.3V	+5.0 V
8.192MHz	2mA	2mA		5mA
10.000MHz	3mA	4mA		7mA
24.576MHz	5mA	6mA		10mA
60.000MHz	11mA	14mA		24mA
150.00MHz	19mA	23mA		36mA

SSB PHASE NOISE at 25°C, 15pF

Offset / dBc / Hz	10Hz	100Hz	1kHz	10kHz	100kHz
EM572T33 10.000MHz	-96	-122	-138	-145	-150
EM572T33 77.760MHz	-74	-105	-120	-124	-120
EM572T33 155.52MHz	-68	-96	-110	-117	-112

EM572T - OUTLINES AND DIMENSIONS



VEM572T VOLTAGE CONTROL SPECIFICATION

Control Voltage:	Standard = +1.5±1.0Volts for all input voltages. *(Contact technical sales if +2.5±2.0 Volts is required.)*
Frequency Deviation:	±5 ppm (Vcon = +1.5±1.0V)
Slope Polarity:	Positive *(increase of control voltage increases output frequency.)*
Input Impedance:	1MΩ minimum
Modulation Bandwidth:	20kHz minimum

FREQUENCY STABILITY

Frequency Stability (ppm)		±0.5	±1.0	±1.5	±2.0	±2.5
Temperature Range (°C)	0 ~ +50	✓	✓	✓	✓	✓
	-10 ~ +60	✓	✓	✓	✓	✓
	-20 ~ +70	✓	✓	✓	✓	✓
	-30 ~ +75	ASK	✓	✓	✓	STD
	-40 ~ +85	x	ASK	✓	✓	✓

✓ = available, x = not available, ASK = call Tech. Sales
STD = Standard

PART NUMBERING PROCEDURE

Example: **EM572T33-38.880-2.5/-30+75**

Series Description
TCXO = EM572T*
VCTCXO = VEM572T*
Supply Voltage
28 = 2.8VDC
3 = 3.0VDC
33 = 3.3 VDC
5 = 5.0 VDC
Frequency (MHz)
Stability over OTR (±ppm)
Operating Temperature Range (OTR) (°C)
Lower and upper limits.

* Above 40MHz part numbers are EML572T or VEML572T to indicate use of a Phase Locked Loop (PLL) circuit above this frequency.

EUROQUARTZ LIMITED Blacknell Lane CREWKERNE Somerset UK TA18 7HE
Tel: +44 (0)1460 230000 Fax: +44 (0)1460 230001 info@euroquartz.co.uk www.euroquartz.co.uk