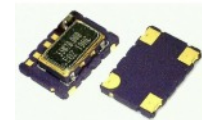


- Miniature 7 x 5 x 2.3mm SMD package
- Frequency range: 40MHz to 156.0MHz
- Supply voltage 2.5, 3.0, 3.3 or 5.0 Volts
- Frequency stability from ± 0.5 ppm



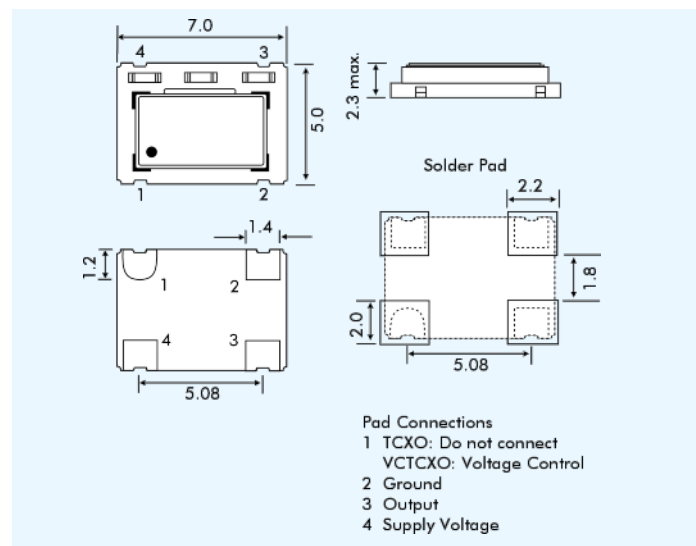
DESCRIPTION

EML572T series TCXOs are packaged in a miniature 4 pad ceramic SMD package. With squarewave HCMOS output, tolerances are available from ± 0.5 ppm. The part has a 0.01 μ F decoupling capacitor built in.

SPECIFICATION

Product Series Code	
TCXO:	EML572T
VCTCXO:	VEML572T
Frequency Range:	40.0MHz to 156.0MHz
Output Waveform:	Squarewave, HCMOS
Initial Calibration Tolerance:	$< \pm 2.0$ ppm at $+25^{\circ} \pm 2^{\circ}C$
Operating Temperature Range:	See table
Frequency Stability	
vs. Ageing:	± 1.0 ppm max. first year
vs. Voltage Change:	± 0.3 ppm max. $\pm 5\%$ change
vs. Load Change:	± 0.3 ppm max. $\pm 10\%$ change
vs. Reflow:	± 1.0 ppm max. for one reflow (Measured after 24 hours)
Supply Voltage:	+2.8, +3.0, +3.3 or +5.0V
Output Logic Levels:	Logic High: 90% Vdd min. Logic Low: 10% Vdd max.
Rise and Fall Times:	10ns max.
Duty Cycle:	50% $\pm 10\%$ standard, 50% $\pm 5\%$ option
Start-up Time:	5ms typ., 10ms max.
Current Consumption	
at 40.000MHz:	10mA max.
at 77.760MHz:	32mA max.
at 155.520MHz:	50mA max.
Output Load:	15pF
Storage Temperature:	-55~+125 $^{\circ}C$

EML572T - OUTLINES AND DIMENSIONS



VEML572T VOLTAGE CONTROL SPECIFICATION

Control Voltage Centre:	Standard = $+1.5 \pm 1.0$ Volts for all input voltages.
Frequency Deviation:	± 5 ppm (Vcon = $+1.5 \pm 1.0V$)
Slope Polarity:	Positive (increase of control voltage increases output frequency.)
Input Impedance:	50M Ω minimum
Modulation Bandwidth:	20kHz minimum
Linearity:	$\pm 10\%$ maximum

FREQUENCY STABILITY

Frequency Stability (ppm)	± 0.5	± 1.0	± 1.5	± 2.0	± 2.5	± 3.0
Temperature Range ($^{\circ}C$)	0 ~ +50	✓	✓	✓	✓	✓
	-10 ~ +60	ASK	✓	✓	✓	✓
	-20 ~ +70	x	✓	✓	✓	✓
	-30 ~ +75	x	✓	✓	✓	✓
	-40 ~ +85	x	ASK	✓	✓	✓

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

SSB PHASE NOISE at 25 $^{\circ}C$, 15pF

Offset: dBc/Hz	10Hz	100Hz	1kHz	10kHz	100kHz
EM572T33 40.000MHz	-85	-102	-121	-130	-132
EM572T33 77.760MHz	-74	-99	-98	-95	-90
EM572T33 155.52MHz	-68	-96	-100	-99	-90

PART NUMBERING PROCEDURE

