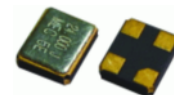


CMOS 3.28 x 2.5 x 0.9mm SMD

nA Current 32.768kHz

- Miniature 3.28 x 2.5mm SMD package
- Frequency: 32.768kHz
- Very low current consumption, 0.79µA at 1.8V supply
- Supply voltage 1.8, 2.5, 3.0, 3.3 or 5.0 Volts
- Frequency stability ±5ppm over -40 to +85°C



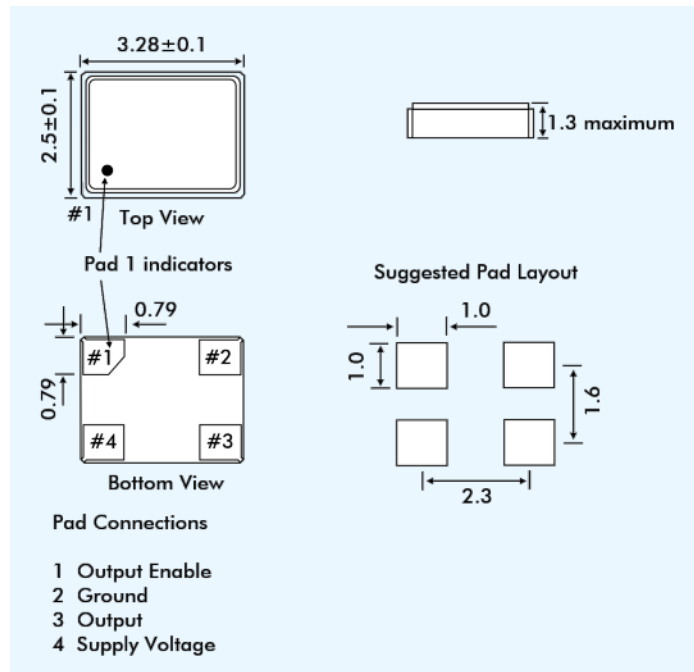
DESCRIPTION

EME32T series TCXOs are packaged in a miniature 4 pad ceramic SMD package. Low current consumption with squarewave (CMOS) output, tolerance is ±5.0ppm over -40° to +85°C.

SPECIFICATION

Product Series Code:	EME32T
Output Waveform:	CMOS Squarewave
Initial Calibration Tolerance:	±1.5ppm (at t. 25°±2°C)
Frequency Stability:	
-40° to +85°C:	±5.0ppm
Timing error over time:	
±0.432 s/day	
±12.960 s/month	
±2.628 m/year (T = 25°C)	
Frequency Stability	
vs. Ageing:	±3.0 ppm max. first year
vs. Voltage Change:	±0.2 ppm max. ±5% change
vs. Load Change:	±0.2 ppm max. ±10% change
vs. Reflow:	±1 ppm max. for one reflow (Measured after 24 hours)
vs. All range of Vdd:	±1.0ppm/Volt max.
Supply Voltage Variation (ΔVdd):	0.25V max. Condition ΔV/Δt = 1V /us
Output Logic / Output Load:	CMOS / 15pF
Output Voltage Level 'HIGH':	Vdd -0.4V min. Ioh = 0.1mA
Output Voltage Level 'LOW':	0.4V max. Ioh = 0.1mA
Rise and Fall Times:	100ns max.
Duty Cycle:	50%±10% typical
Start-up Time:	1s max. at 25°C
	3s max. Over -40° to +85°C
Pad 1 OE Thresholds:	Vih = 0.8*Vdd, Vil = 0.2*Vdd

EME32T - OUTLINES AND DIMENSIONS



POWER SUPPLY VOLTAGE

Supply Voltage	Tolerance
1.8V	±5%
2.5V	±5%
3.0V	±5%
3.3V	±5%
5.0V	±10%

CURRENT CONSUMPTION

Supply Voltage	Current (max.)
1.8V	0.79µA
2.5V	1.05µA
3.0V	1.25µA
3.3V	1.37µA
5.0V	2.05µA

PART NUMBERING PROCEDURE

Example:

EME32T33-32.768k-5.0/-40+85

Series Description
TCXO = EME32T

Supply Voltage

18 = 1.8 VDC
25 = 2.5 VDC
3 = 3.0 VDC
33 = 3.3 VDC
5 = 5.0 VDC

Frequency (kHz)

Stability over OTR (±ppm)

Operating Temperature Range (OTR) (°C)
(Lower and upper limits.)