EQ3225 TCXO

3.2 x 2.5mm SMD TCXO — 9.6MHz to 30.0MHz

- **Ultra-miniature 3.2 x 2.5 x 1.0mm SMD package**
- **Frequency range: 9.6MHz to 30.0MHz**
- **Available with either CMOS or clipped sinewave output**
- **May be ordered as TCXO or Voltage-Controlled TCXO**
- **Supply voltage 3.3 Volts**

DESCRIPTION

EQ3225 TCXOs are packaged in an ultra-miniature 4 pad ceramic, 3.2 x 2.5mm outline SMD package. The part is available as a TCXO or as a voltage-controlled TCXO (VCTCXO). Output may be specified as either clipped sinewave or CMOS. The part has excellent phase nose characteristics and provides a stable source of clock signals over a wide operating temperature range.

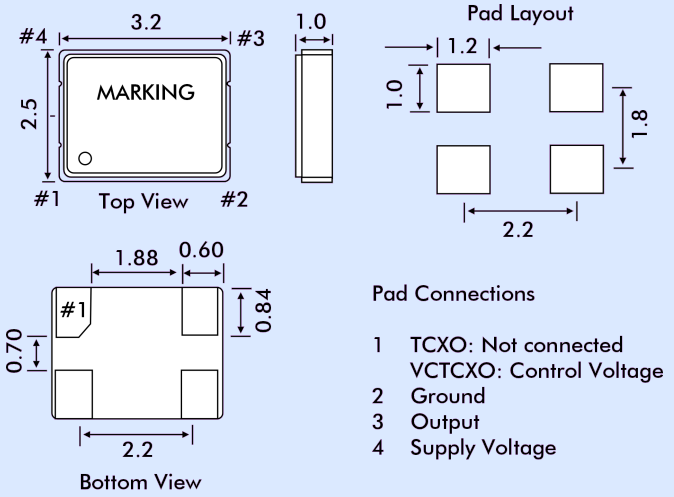
SPECIFICATION

Product Code:	EQ3225
Frequency Range:	9.6MHz to 30.0MHz
Frequency Stability	
vs. Temperature Range:	±2.0 or ±2.5ppm
vs. Supply Voltage (±5%):	±0.3ppm maximum
vs. Load Change (±5%):	±0.2ppm maximum
vs. Ageing (at 25°C):	±1.0ppm maximum
Intitial Frequency Tolerance:	±1.5ppm maximum
Operating Temperature Range:	-30° to +80°C
Storage Temperature Range:	-40° to +90°C
Supply Voltage:	+2.4V min., +3.6V max.
Current Consumption	
CMOS:	6.0mA maximum
Clipped Sinewave:	2.0mA maximum
Output Voltage Level	
CMOS:	80% Vdd minimum
Clipped Sinewave:	0.8V p-p minimum
Output Load	
CMOS:	1kΩ//15pF
Clipped Sinewave:	10kΩ//10pF
Dynamic Behaviour	
-20° to +80°C:	±0.30ppm/°C
-30° to -20°C:	±1.0ppm/°C
Start-up Time:	3.0ms max. to 90% Vdd
Duty Cycle:	60/40%
Harmonics:	-9dBc maximum

SSB PHASE NOISE at 25°C

Offset	10Hz	100Hz	1kHz	10kHz
EQ3225 (dBc/Hz)	-86	-115	-138	-146

EQ3225 - OUTLINES AND DIMENSIONS



EQ3225 VOLTAGE CONTROL SPECIFICATION

Control Voltage:	Nominal 50% Vdd (0V min, Vdd max.)
Frequency Deviation:	±5.0ppm min., ±15ppm max.

PART NUMBERS

Example: EQ3225-S-V10-20.000-2.5/-30+80

Explanation: **EQ3225 - S - V10 - 20.000 - 2.5/-30+80**

- Series Description EQ3225
- Output Type T = HCMOS S = Clipped Sinewave
- VCTCXO (V10 = VCTCXO ±10ppm pullability.) Blank for TCXO
- Nominal Frequency (MHz)
- Stability over Temperature ±ppm
- Operating Temperature Range Lower and upper limits °C

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