

EQAX-M10S

OCXO with STRATUM IIIe stability (ACS 8510 Chipset)

DESCRIPTION

The Euroquartz EQAX-10S OCXO conforms to IEC60679-1, Stratum 3, providing a low-noise, highly-stable and reliable source of clock signals.

FEATURES

- Compact, SMD package
- Frequency range from 10Mhz to 20MHz
- Operating temperature range, -20° to +70°C
- Operable temperature -30° to +75°C
- **Supply Voltage 3.3 Volts**

SPECIFICATION

10.0Mhz to 20.0Mhz Frequency Range: **Standard Frequencies:** 12.800MHz

Frequency Stability

±100ppb @+25°C **Initial Tolerance:** Vs. Temperature: ± 10 ppb $-20^{\circ} \sim +70^{\circ}$ C

Vs. Supply Voltage Var: $\pm 2ppb$ Vs. Load Change: ±1ppb

±500ppb (@40°C, 30 days) Long Term Ageing (1st Year):

Long Term Stab. (15 Years): ± 4.6 ppm

RF Output

Signal Waveform: **HCMOS** Load: 15pF

Rise/Fall Time: 10ns maximum 60%/40% Symmetry (Duty Cycle): Warm-up Time: 5 minutes

Supply Voltage

+3.13 Volts Minimum: +3.30 Volts Typical: Maximum: +3.47 Volts

Current Consumption: 300mA maximum (@25°C)

Operable Temperature Range: -30°~+75°C -40°~+85°C Storage Temperature Range: As drawing **Enclosure:**

Weight: 9_{gm}

Tape & Reel (IEC 60286-3) Packing Type:

ESD Sensitivity: 1500V minimum (IEC6100-4-2)

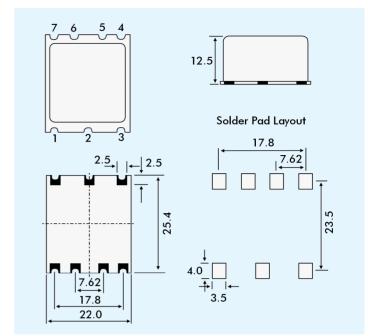
ORDERING CODE

To order, specify as follows:

FREQUENCY - MODEL

12.800MHz EQAX-M10S EXAMPLE:

OUTLINES AND DIMENSIONS



PAD CONNECTIONS	Pad No.	Symbol	Function
	1	NC	Not Connected
	2	NC	Not Connected
	3`	Vs	Supply Voltage
	4	RF OUT	RF Output
	5	NC	Not Connected
	6	NC	Not Connected
ENIVIDONIMENTAL	7	GND	Ground

ENVIRONMENTAL

Test	IEC 60068 Part	IEC 61178-1 Clause	Test Conditions
Visual inspection,		4.5	Enclosure styles as in
Dimensions		4.6	IEC 60122-3, if applic.
Sealing tests	2-17	4.8.2	Gross Leak: Test Qc Fine Leak: Test Qk
Solderability, Resistance to	2-20	4.8.3	Test Ta (235±5°C), method 1 Test Tb, method 1A, 5s
soldering heat Shock	2-27	4.8.8	Test Ea, 3x per axis 100g, 6ms 1/2sine
Bump	2-29	4.8.6	Test Eb, 4000 bumps/ axis, 40g, 6ms
Free fall	2-32	4.8.9	Test Ed, procedure 1, 2 drops from 1m ht.
Vibration, Sinsoidal	2-6	4.8.7	Test Fc, 30 min/axis, 10Hz-55Hz, 0.75mm; 55Hz -2kHz, 10q
Rapid change of Temperature	2-14	4.8.5	Test Na, 10 cycles at extremes of operating temperature range.
Dry heat	2-2	4.8.11	Test Ba, 16 h at upper temperature.
Damp heat, cyclic	2-30	4.8.12	Test Db variant 1 severity b, 55°C/95%rh
Cold	2-1	4.8.13	Test Aa, 2h at lower temperature indicated by climatic category.
Climatic sequence	1-7	4.8.14	Sequence of 4.8.11, 4.8.12 and 4.8.13
Damp heat, steady state	2-3	4.8.15	Test Ca, 56 days
Endurance tests, - ageing - extended ageing		4.9.1 4.9.2	30 days @ 85°C 1kh, 2kh, 8kh, @85°C