

XO90 SERIES Plastic Encapsulated 14 x 9.8mm SMD Oscillators

DESCRIPTION

The Euroquartz range of XO90, plastic encapsulated oscillators have stabilities from ± 25 ppm over -40° to 85° C. In addition to the stability over operating temperature range customers may also choose from supply voltages of 3.3 and 5.0 Volts, An Enable/Disable function is available.

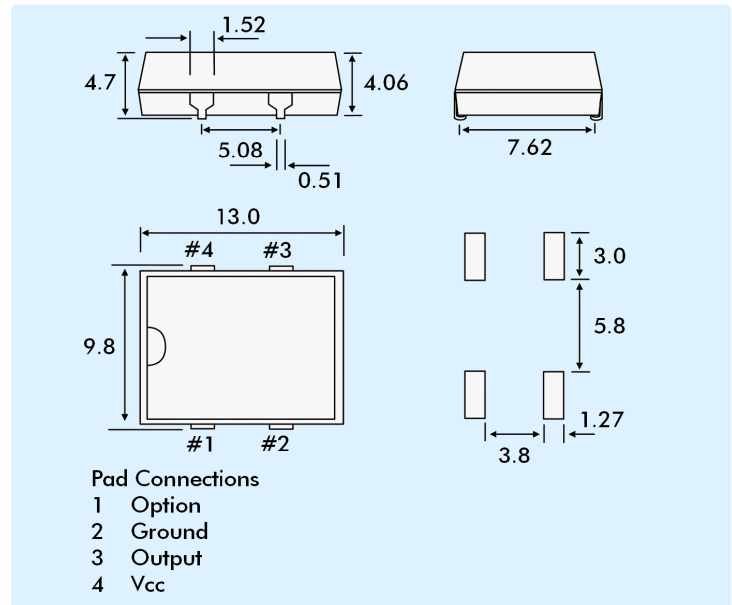
FEATURES

- Industry-standard 14 x 9.8mm SMD package
- Frequency range 1MHz to 133MHz
- Supply Voltages 3.3 Volts or 5.0 Volts
- Enable/Disable function option.

GENERAL SPECIFICATION

Package Type:	Plastic (Resin)encapsulated
Frequency Range:	1.0MHz to 100.0MHz
Frequency Stability*:	± 25 ppm to ± 100 ppm (over operating temperature range)
Operating Temperature Range:	0° ~ $+70^{\circ}$ C, Part code: 'C' -40° ~ $+85^{\circ}$ C, Part code: 'I'
Storage Temperature Range:	-55° to $+125^{\circ}$ C
Ageing:	± 5 ppm/year maximum ($T_a = 25^{\circ}$ C, $V_{dd} = 2.7V, 3.3V$ or $5.0V$)
Packaging:	Bulk pack or tubed
Output Levels:	TTL or CMOS
Maximum Output Loads	
< 40MHz:	30pF
> 40MHz:	15pF
Duty Cycle	
CMOS < 40MHz:	45/55% maximum
CMOS > 40MHz:	40/60% maximum
Output Clock Rise/Fall Times:	4ns maximum
Power Supply Current:	25mA (unloaded)
Start-up Time:	10ms maximum (from power-on)
Output Disable Time	
Synchronous:	T/2ns typical, T+10ns maximum
Asynchronous:	10ns typical, 15ns maximum (T = frequency period)
Output Enable Time:	100ns maximum

OUTLINE & DIMENSIONS



PRODUCT SELECTION

Model Number	Frequency Stability (ppm)	Operating Temperature Range
XO90100UC	± 100	0° ~ $+70^{\circ}$
XO90050UC	± 50	0° ~ $+70^{\circ}$
XO90025UC	± 25	0° ~ $+70^{\circ}$
XO90100UI	± 100	-40° ~ $+85^{\circ}$
XO90050UI	± 50	-40° ~ $+85^{\circ}$
XO90025UI	± 25	-40° ~ $+85^{\circ}$

PART NUMBER GENERATION

Frequency	Model No.	Supply Voltage	Output Option
Nominal Frequency (MHz)	See table above	Blank = 5.0 Volts A = 3.3 Volts	T = Tristate (Enable/Disable)

EXAMPLE: 24.8920MHz XO90050UCTA

Frequency = 24.8920MHz, XO90 package, ± 50 ppm 0° ~ $+70^{\circ}$ C, Tristate, supply voltage 3.3 Volts

* The frequency stability parameter is an inclusive figure and includes adjustment tolerance at 25° C, stability over operating temperature range, variations due to load change $\pm 10\%$, supply voltage change $\pm 10\%$, first year ageing, shock and vibration.