XO90 SERIES
Plastic Encapsulated 14 x 9.8mm SMD Oscillators

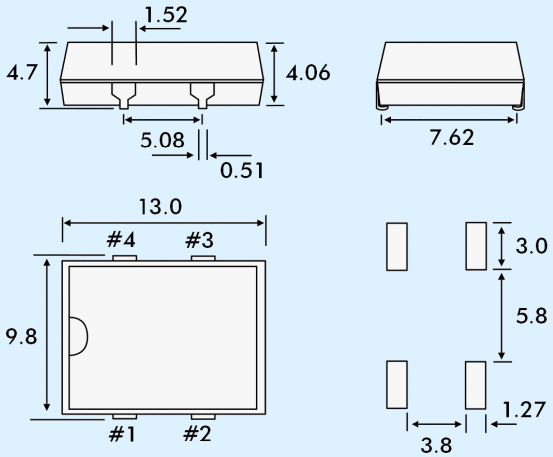
DESCRIPTION

The Euroquartz range of XO90, plastic encapsulate oscillators have stabilities from ±25ppm 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.

OUTLINE & DIMENSIONS



Pad Connections
1 Option
2 Ground
3 Output
4 Vcc

GENERAL SPECIFICATION

Package Type:	Plastic (Resin)encapsulated
Frequency Range:	1.0MHz to 100.0MHz
Frequency Stability*:	±25ppm to ±100ppm *(over operating temperature range)*
Operating Temperature Range:	0° ~ +70°C, Part code: 'C' -40° ~ +85°C, Part code: 'I'
Storage Temperature Range:	-55° to +125°C
Ageing:	±5ppm/year maximum *(Ta=25°C, Vdd=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

** 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 ±10%, supply voltage change ±10%, first year ageing, shock and vibration.*

PRODUCT SELECTION

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

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, ±50ppm 0°~+70°C, Tristate, supply voltage 3.3 Volts

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