

Version	B	Option
	Standard	
Crystal resonator	SC Cut BVA technology	
Standard frequencies	5 MHz	
Optional frequency	10 MHz	
Operating temperature range (X)	-30°C to +60°C	See table
Frequency stability (Δ f/f)		
Long term stability (aging after 30 days of continuous operation)	2x10 ⁻¹¹ /day 5x10 ⁻¹⁰ /month 4x10 ⁻⁹ /year	G: 1x10 ⁻¹¹ /day H: 5x10 ⁻¹² /day J: 3x10 ⁻¹² /day See table
Over temperature range(γ)	≤ 2x10 ⁻¹⁰ peak to peak	See table
Versus power supply	5x10 ⁻¹¹ (Vcc ±10%)	
Versus load changes	2x10 ⁻¹¹ (50Ω ±10%)	
Short term stability σ(τ)	5x10 ⁻¹³ (0.2-30s)	Lower value : see table
g sensitivity	< 5x10 ⁻¹⁰ / g	
Frequency control range	Standard : E Full Electrical	Option : M Mechanical
Fine adjustment option E	>± 1x10 ⁻⁷ <± 1.5x10 ⁻⁷ by external control voltage 0 to +10 Volts	
Coarse adjustment option M	>=± 1x10 ⁻⁷ by built-in 10 turn pot. with external control voltage at +5 Volts	
Fine adjustment option M	>± 2x10 ⁻⁸ by external control voltage 0 to +10Volts (with built-in potentiometer centered for nominal frequency at +5 Volts)	
Output specifications	On both SMA connectors	
Wave form	Sine	
Level / Impedance	7 dBm ± 1/50Ω	
Phase noise at 5 MHz & 10 MHz (Bw=1Hz)	See table page 1	
Harmonics	< -40 dBc	
Spurious	< -70 dBc	
Power supply		
Input voltage range (DC)	+24V DC ± 10%	
Power consumption	< 3W after warm-up at 25°C, < 10W during warm-up	
Environment		
Storage temperature	-30°C to 85°C	
Vibration	MIL STD 167-1	
Shock	30g, 11ms, 3 shocks in each direction of the main axis	
Size (LxWxH)	138 x 73 x 88 mm	
Weight	900 g	
Outline & electrical connections	See drawing page 4	

Short term stability option	Tau = 0.2 S	Tau = 1.0 S	Tau = 3.0s — 30s	Option
Sigma Tau < 0.8 x 10 ⁻¹³ .(option valid only @ 5 MHz)	1,5 x 10 ⁻¹³	1,3 x 10 ⁻¹³	8 x 10 ⁻¹⁴	Option 08

Short term stability option	Tau = 0.2 S	Tau = 0.4 S	Tau = 1.0 S — 30s	Option
Sigma Tau < 2.5 x 10 ⁻¹³	4.0 x 10 ⁻¹³	3.0 x 10 ⁻¹³	2.5 x 10 ⁻¹³	Option 25
Sigma Tau < 2.0 x 10 ⁻¹³	3.5 x 10 ⁻¹³	2.5 x 10 ⁻¹³	2.0 x 10 ⁻¹³	Option 20
Sigma Tau < 1.5 x 10 ⁻¹³	3.0 x 10 ⁻¹³	2.0 x 10 ⁻¹³	1.5 x 10 ⁻¹³	Option 15
Sigma Tau < 1.0 x 10 ⁻¹³	2.5 x 10 ⁻¹³	1.5 x 10 ⁻¹³	1.0 x 10 ⁻¹³	Option 10

Oscilloquartz SA reserves the right to change all specifications contained herein at any time without prior notice.





