

OCXO 8620 / 8625 DIL 12V Power Supply

Oven Controlled Crystal Oscillator : Up to 60MHz

The 8620 / 8625

The excellent characteristics are the results of an optimization of the strip AT cut crystal resonator combine with a custom Integrated circuit.

Features

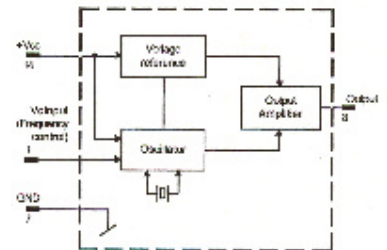
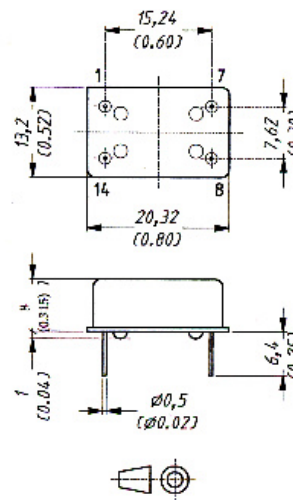
- Low power consumption
- Wide temperature range (-40°C to +85°C)
- Fast warm-up

Benefits

- Very small volume and light weight
- Optimal for use in adverse conditions
- Virtually no waiting time after switch-on
- Ideal for battery operated systems
- Ideal for synthesizer applications

Outline and Electrical connections Bloc diagram

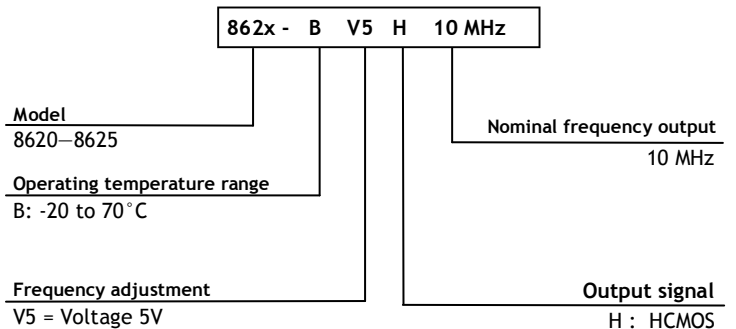
All dimensions in mm (inches)



Pin-out connections

- 1: Vc input
- 7: GND
- 8: Output
- 14: +Power supply

Ordering Information



FREQUENCY STABILITY VS TEMPERATURE

	8620	8625
0°C to +60°C A	< 0.4 ppm	< 0.1 ppm
-20°C to +70°C B	< 0.6 ppm	< 0.2 ppm
-40°C to +85°C C	< 1.0 ppm	< 0.4 ppm

Customer's specification on request

Standard / Option	Standard	Option
Standard frequencies	10 / 16.384 / 20 / 40 MHz	
Operating Temperature Range	See page 1	On Request
Frequency stability ($\Delta f/f$)		
Long term stability	1st Year : $< \pm 0.7$ ppm 10 Years : $< \pm 4.0$ ppm	On Request
Over Temperature Range	See page 1	On Request
Versus supply voltage change	$< \pm 0.1$ ppm	On Request
Versus load changes ($\pm 10\%$)	$< \pm 0.01$ ppm	
Short Term Stability σ (τ) (0.1 to 30s)	$< 5 \times 10^{-10}$ (Typical 5×10^{-11} @ 1s)	
Mean of Frequency Control	R1	V5
Adjustment control	0 to 10K Ω	0 to 5 Volts
Input Impedance	$> - 4.7K\Omega$	$> 47 K\Omega$
Pulling Range	$> \pm 4$ ppm	
Transfer function	Positive	
Power Supply (P)		
Input voltage range (DC)	+12 Volts $\pm 0.5V$	
Input current	Warm-up @ 30°C $< 250mA$ during 10s $< 30mA$ after warm-up at 30°C $< 50mA$ after warm-up at -20°C	
Warm-up ($\Delta f/f$)	Within specification after 30s @ 0°C	
Environment (Not operating)		
Storage temperature	-65°C to +125°C	
Vibration	10 to 2000 Hz / 10g	
Shock	3000g , 0.3ms half-sine	
Weight	5g	
Output Characteristics	H	S
Wave form	Square	Sine
Output signal / Output Level	HCMOS compatible	$> 1V_{pp} < 2V_{pp}$
Symmetry / Harmonics	40 - 60% at $V_{cc}/2$	-10 dBc
Rise / Fall time / Spurious	$< 7ns$	-70 dBc
Level VOL / VOH	$< 0.4V / > V_{cc} - 0.5V$	NA
Fan Out (Load) / Impedance	10LS	1 K Ω // 5pF
Phase Noise (BW=1Hz)	Typical value @ 10MHz in static conditions	
1Hz	-60 dBc / Hz	-70 dBc / Hz
10Hz	-90 dBc / Hz	-100 dBc / Hz
100Hz	-120 dBc / Hz	-130 dBc / Hz
1000Hz	-130 dBc / Hz	-140 dBc / Hz
10000Hz	-130 dBc / Hz	-140 dBc / Hz

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

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