

# OCXO 8622 / 8627 DIL 3.3V Power Supply

## Oven Controlled Crystal Oscillator: Up to 40MHz

### The 8622 / 8627

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

#### **Features**

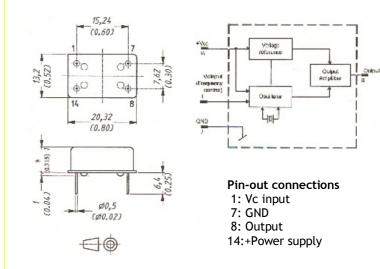
- Low power consumption
- Wide temperature range  $(-40^{\circ}C \text{ to } +85^{\circ}C)$
- > Fast warm-up

#### **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

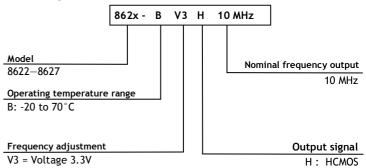
All dimensions in mm (inches)



#### FREQUENCY STABILITY VS TEMPERATURE 8622 8627 0°C to +60°C < 0.4 ppm < 0.2 ppm -20°C to +70°C В < 0.6 ppm < 0.3 ppm -40°C to +85°C C

< 1.0 ppm

# **Ordering Information**



### Customer's specification on request

< 0.5 ppm



# **Technical Specifications**

# OCXO 8622 / 8627

## **Oven Controlled Crystal Oscillator**

Standard / Option	Standard	Option
Standard frequencies	10 / 16.384 / 20 MHz	On Request
Operating Temperature Range	See page 1	On Request
Frequency stability (Δ f/f)		
Long term stability	1st Year : < ± 0.7 ppm 10 Years : < ± 4.0 ppm	On Request
Over Temperature Range	See page 1	On Request
Versus supply voltage change	< ± 0.1 ppm	On Request
Versus load changes (± 10%)	< ± 0.01 ppm	
Short Term Stability σ (τ ) (0.1 to 30s)	< 5x10 <sup>-10</sup> (Typical 5x10 <sup>-11</sup> @ 1s)	
Mean of Frequency Control	R1	V3
Adjustment control	0 to 10KΩ	0 to 3.3 Volts
Input Impedance	> - 4 <b>.</b> 7KΩ	> 47 KΩ
Pulling Range	> ± 4 ppm	
Transfer function	Positive	
Power Supply (P)		
Input voltage range (DC)	+3.3 Volts ± 0.15V	
Input current	Warm-up @ 30°C < 250mA during 30s < 110mA after warm-up at 30°C < 170mA after warm-up at -20°C	
Warm-up (∆ f/f)	Within specification after 60s @ 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	Н	S
Wave form	Square	On request
Output signal / Output Level	HCMOS compatible	On request
Symmetry / Harmonics	40 - 60% at Vcc/2	On request
Rise / Fall time / Spurious	< 7ns	On request
Level VOL / VOH	<0.4V / >Vcc -0.5V	On request
Fan Out ( Load) / Impedance	10LS	On request
Phase Noise (BW=1Hz)	Typical value @ 10MHz in static conditions	
1Hz 10Hz 100Hz 1000Hz 10000Hz	-70 dBc /Hz -100 dBc / Hz -130 dBc / Hz -140 dBc / Hz -145 dBc / Hz	

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

# www.oscilloquartz.com



