



### Features and Benefits

- Frequency range: 10MHz
- Supply voltage: 5V
- Steady current: 350mA
- Output waveform: Sine wave
- Frequency stability vs. operating temperature: ±0.05ppb
- Aging: ±0.05ppm/year
- Phase noise@100KHz: -162dBc/Hz
- Operating temperature: -40°C to +85°C
- Size: 35.4x26.7x15.8mm

### Typical Applications

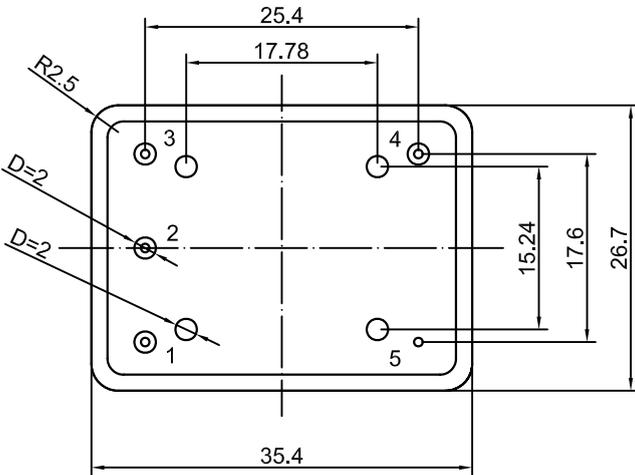
- Rubidium Standard Replacement
- GPS Receivers
- Instrumentation
- Stratum 2 Clock Systems

### Description

The DOCXO3627AW-10MHz-B-V operate in 10 MHz frequency, the module concept of the OCXOs design allowed realization of same performance in a variety of small packages on customer choice under various models.

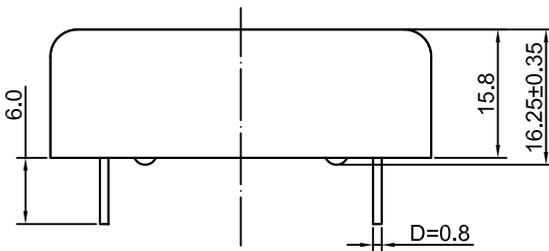
### Mechanical Drawing & Pin Connections

Drawing No: A8 % \$\$+- !&



Pin	Signal
1	Electrical tuning
2	Reference voltage
3	+V Supply
4	RF OUT
5	GND

Unit in mm  
1mm = 0.0394 inches





**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency	F <sub>nom</sub>			10		MHz	
<b>RF Output</b>							
Signal Waveform			Sinewave				
Level			+7			dBm	
Load			45	50	55	ohm	
Harmonics					-25	dBc	
<b>Power Supply</b>							
Supply Voltage	V <sub>cc</sub>		4.75	5.0	5.25	V	
Warm-up Time		Δf/f=1e-7 , at +25°C			300	sec	ref. to freq. after 15 min. of operation
Power Consumption		Steady state, +25°C			350	mA	
		Warm-up			1300	mA	
<b>Frequency Adjustment Range</b>							
Electronic Frequency Control	V <sub>c0</sub>	V <sub>c</sub> =0V			-0.3	ppm	
		V <sub>c</sub> =V <sub>ref</sub>	0.3			ppm	
Preset control voltage		Disconnected V <sub>c</sub> pin	1.8	2.1	2.4	V	
Control voltage Range	V <sub>c</sub>		0		4.3	V	
Reference voltage	V <sub>ref</sub>		4.0	4.2	4.3	V	
<b>Frequency Stability</b>							
Versus Operating Temperature Range		ref. 25°C,			±0.05	ppb	-40°C to +85°C
Initial Tolerance	(f-f <sub>0</sub> )/f <sub>0</sub>	@+25°C, V <sub>c</sub> =V <sub>c0</sub>			±0.1	ppm	
Versus supply voltage		ref V <sub>cc</sub> typ			±0.05	ppb	
Aging Per Day		after 30 days of operation			±0.5	ppb	
Aging 1 <sup>st</sup> Year					±0.05	ppm	
SSB Phase noise (Static. Values are for reference only and are subject to change.)		1Hz		-95		dBc/Hz	
		10Hz		-125		dBc/Hz	
		100Hz		-145		dBc/Hz	
		1kHz		-155		dBc/Hz	
		10kHz		-160		dBc/Hz	
		100kHz		-162		dBc/Hz	
<b>Maximum ratings, Environmental, Mechanical Conditions</b>							
Airflow velocity	0.5 m/s maximum						
Operating temperature range	-40°C to +85°C						
Storage temperature range	-60°C to +90°C						
Mechanical shock	Per MIL-STD-202, 30G, 11ms						
Soldering conditions	Hand solder only – not reflow compatible. 260°C 10s (on pins)						
Humidity	Hermetically sealed						
Vibration	Per MIL-STD-202, 5G to 500Hz						
Washing Conditions	Washing with water or alcohol based detergent allowed only with final enough drying stage						