



### Features and Benefits

- 30MHz Frequency
- 12V Supply voltage
- Sinewave Output waveform
- 35.4x26.7x15.8mm Size
- 145dBc/Hz @ 1KHz phase noise value

### Typical Applications

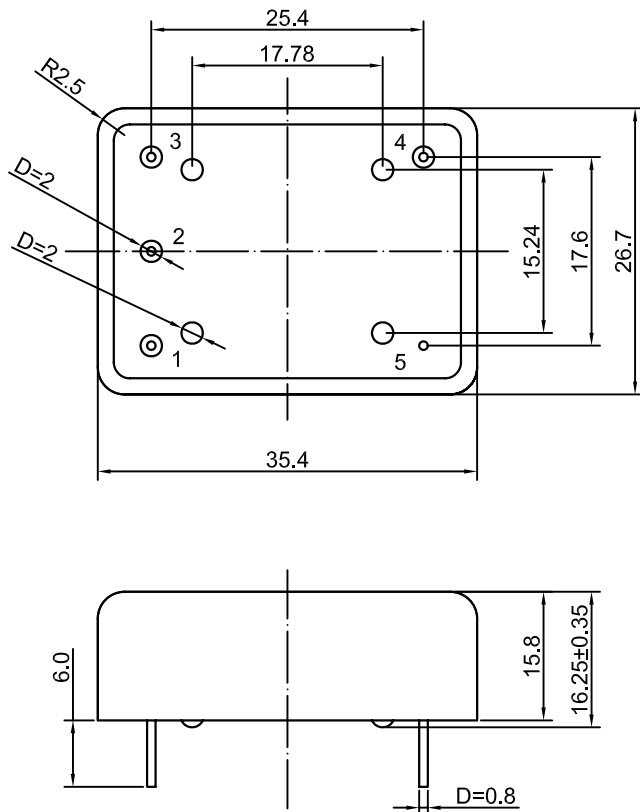
- Cellular Base Stations
- Instrumentation
- Microwave Applications
- Stratum 3E clock systems
- Radar reference

### Description

The DOCXO3627C-51422-30MHz operate in 30 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.

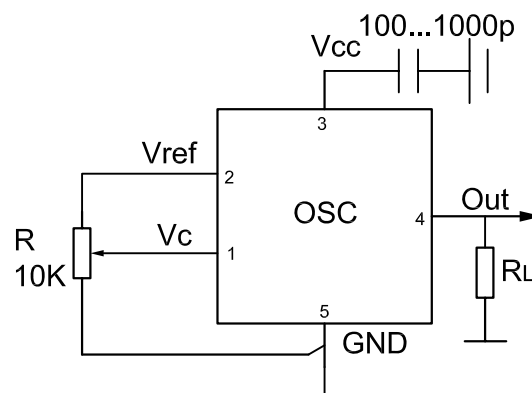
### Mechanical Drawing & Pin Connections

Drawing No: MD140079-2



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>			30		MHz	
<b>RF Output</b>							
Signal Waveform			Sinewave				
Level			+7			dBm	
Load			45	50	55	ohm	
Harmonics					-25	dBc	
Sub-Harmonics					-40	dBc	
<b>Power Supply</b>							
Supply Voltage	V <sub>cc</sub>		11.4	12	12.6	V	
Warm-up Time		Δf/f=1e-8			300	sec	at +25°C ref at 0.5h
Power Consumption		Steady state, +25°C			160	mA	
		Warm-up	350		520	mA	
<b>Frequency Adjustment Range</b>							
Electronic Frequency Control		V <sub>c</sub> =0V	-0.3			ppm	
		V <sub>c</sub> =V <sub>cV</sub>	0				
		V <sub>c</sub> =V <sub>ref</sub>	+0.3				
EFC voltage	V <sub>c</sub>		0		4.3	V	
Preset control voltage	V <sub>c0</sub>	disconnected V <sub>c</sub> pin	1.8	2.1	2.4	V	
Reference voltage	V <sub>ref</sub>		4.0	4.2	4.3	V	
Input impedance			11 kohm				
Output resistance of V <sub>ref</sub>			91 ohm				
<b>Frequency Stability</b>							
Versus Operating Temperature Range		ref. 25°C			±0.05	ppb	
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	
Versus load		±5% change			±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.)		10Hz		-115		dBc/Hz	
		100Hz		-135		dBc/Hz	
		1kHz		-145		dBc/Hz	
		10kHz		-150		dBc/Hz	
		100kHz		-152		dBc/Hz	
<b>Maximum ratings, Environmental, Mechanical Conditions</b>							
Airflow velocity	0.5 m/s maximum						
Operating temperature range	-30°C to 70°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						
Power Voltage	-0.5V to 14.4V						
Control Voltage	-1.0V to 6V						
Vibration	Per MIL-STD-202, 5G to 500Hz						
Washing Conditions	Washing with water or alcohol based detergent allowed only with final enough drying stage						