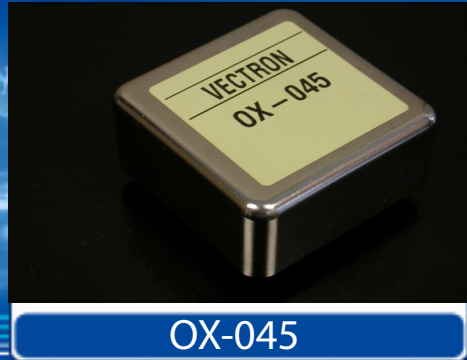


Helping Customers Innovate, Improve & Grow



OX-045

### Features

- Low Phase Noise
- High Stability
- SC-Cut Crystal Standard
- Frequency : 10 MHz

### Applications

- Test Equipment
- Frequency Synthesizers
- Position Location
- Satellite Communications

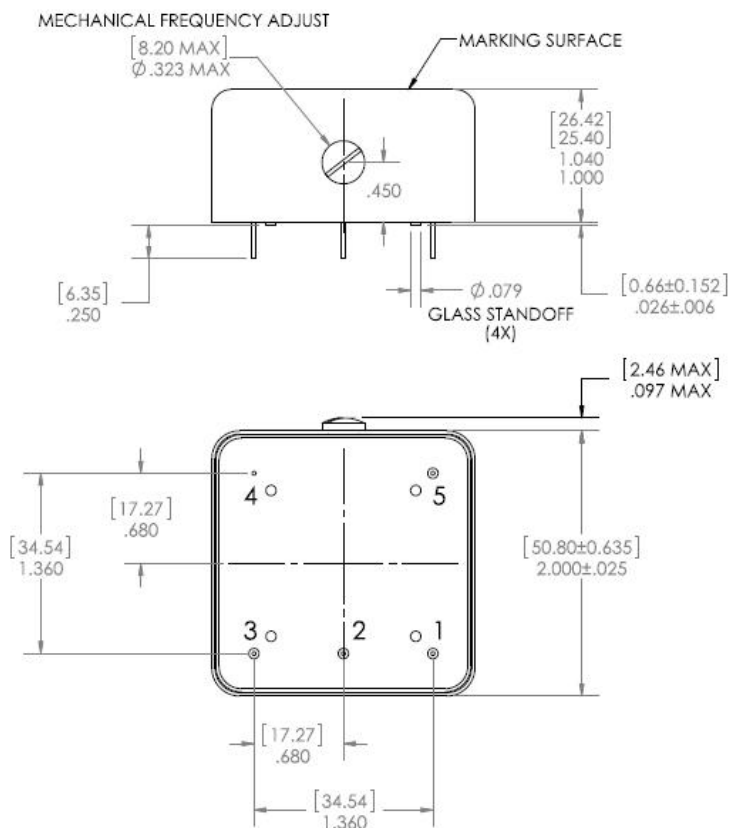
## Performance Specifications

Parameter	Min	Typ	Max	Units	Condition
<b>Frequency Stabilities<sup>1</sup></b>					
vs. operating temperature range (referenced to +25°C)	-3		+3	ppb	0... +70°C
	-5		+5	ppb	-20... +70°C
	-10		+10	ppb	-40... +70°C
Initial Tolerance	-10		+10	ppb	at time of shipment, nominal EFC
vs. supply voltage change	-0.5		+0.5	ppb	Vs ± 5%
vs. load change	-0.5		+0.5	ppb	Load ± 5%
vs. aging / daily	-0.1		+0.1	ppb	after 72 hours of operation
vs. aging / 1 year	-25		+25	ppb	after 72 hours of operation
vs. aging / year (following years)	-10		+10	ppb	
ADEV			5	e-12	1 second TAU
Warm-up Time			5	minutes	to ± 10ppb of final frequency (1 hour reading) @ +25°C
<b>Supply Voltage (Vs)</b>					
Supply voltage (Standard)	11.4	12.0	12.6	VDC	
Supply voltage (Option)	14.25	15.0	15.75	VDC	
Power Consumption			9.0	Watts	during warm-up
			2.0	Watts	steady state @ +25°C

## Performance Specifications

Parameter	Min	Typ	Max	Units	Condition
<b>RF Output</b>					
Signal	Sinewave				
Load		50		ohm	
Output Power	+8.0	+10.0	+12.0	dBm	50 ohm load
Harmonics			-30	dBc	50 ohm load
	Mechanical Trim				
	±0.2	±0.3	±0.5	ppm	
<b>Frequency Tuning (EFC)</b>					
Tuning Range	±0.10	±0.2	±0.35	ppm	
Linearity			15	%	
Tuning Slope	Positive				
Control Voltage Range	0.0	+2.0	+4.0	VDC	
<b>Additional Parameters<sup>1</sup></b>					
Phase Noise @10 MHZ		-113 -142 -157 -160 -165 -165	-110 -140 -155 -158 -163 -163	dBc/Hz dBc/Hz dBc/Hz dBc/Hz dBc/Hz dBc/Hz	1 Hz 10 Hz 100 Hz 1 KHz 10 KHz 100 KHz
Weight			100	g	
<b>Absolute Maximum Ratings</b>					
Supply voltage (Vs)			18	V	
Output Load			25	ohm	
Operable temperature range	-55		+85	°C	
Storage temperature range	-55		+125	°C	
Shock					MIL-STD-202, Method 213, Condition J, 30 G, 11ms
Vibration					MIL-STD-202, Method 201 and Method 204, Condition A except 5 G to 500 Hz, 1 sweep
Seal					MIL-STD-202, Method 112, Condition D

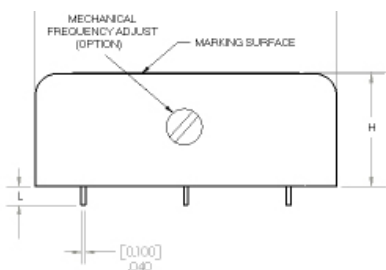
## Outline Drawing / Enclosure



Dimensions in [mm] inches

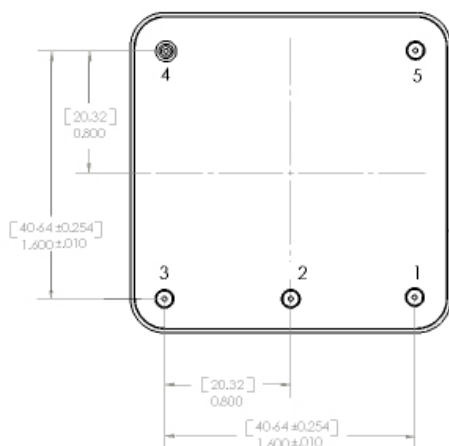
Type A		
Code	Height "H"	Pin Length "L"
0	26.42	6.35

Pin Connections	
1	Electronic Frequency Control (EFC) or N/C
2	No Connect
3	RF Output
4	Ground (Case)
5	Supply Voltage Vs



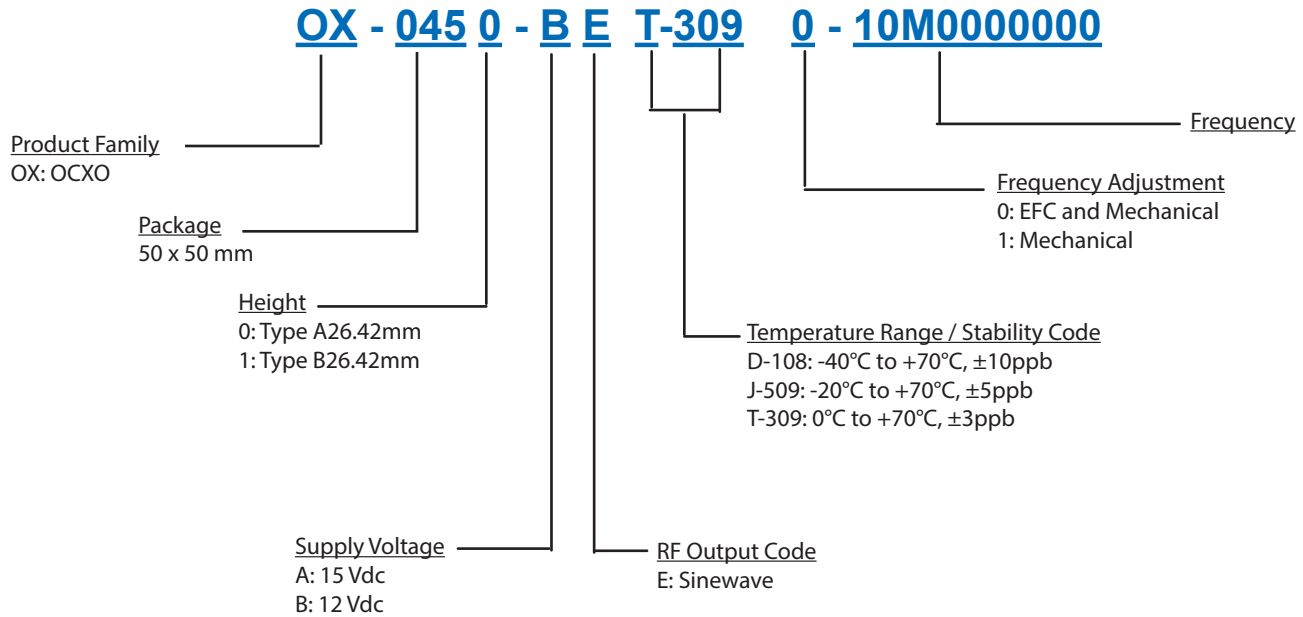
Dimensions in [mm] inches

Type B		
Code	Height "H"	Pin Length "L"
1	26.42	6.35



Pin Connections	
1	Electronic Frequency Control (EFC) or N/C
2	No Connect
3	RF Output
4	Ground (Case)
5	Supply Voltage Input (Vs)

## Ordering Information



**Notes:**

1. Contact factory for improved stabilities or additional product options.
2. Unless other stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C).
3. Subject to technical modification.

## For Additional Information, Please Contact

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Rev: 2/18/2014 jar