

MINIATURE HIGH FREQUENCY PRECISION LOW PHASE NOISE OCXO MV269

Features:

- Small package size 21x13x9.5 mm (DIL 14)
- Low Phase Noise <-170 dBc/Hz @ 100 kHz offset
- Frequency range: 60 – 120 MHz

Power Supply	Output signal
5 V	SIN
3.3 V	HCMOS

ORDERING GUIDE: MV269-C 100 J-5V-SIN-2-100.0MHz

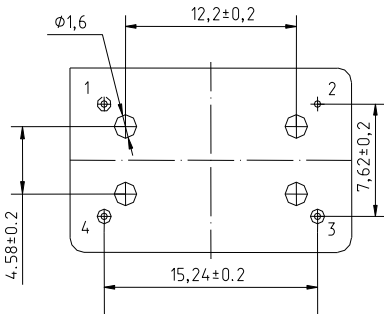
Availability of certain stability vs. operating temperature range		$\pm 5.0 \times 10^{-7}$	$\pm 3.0 \times 10^{-7}$	$\pm 1.0 \times 10^{-7}$	$\pm 7.5 \times 10^{-8}$	$\pm 5.0 \times 10^{-8}$	$\pm 1.5 \times 10^{-8}$
		500	300	100	75	50	15
A	0...+55°C	A	A	A	A	A	A
B	-10...+60°C	A	A	A	A	A	A
C	-20...+70°C	A	A	A	C	NA	NA
D	-40...+70°C	A	A	C	NA	NA	NA
EX	-40...+85°C	A	NA	NA	NA	NA	NA

Aging	
J	$\pm 5 \times 10^{-7}$ /year
I	$\pm 3 \times 10^{-7}$ /year
H	$\pm 2 \times 10^{-7}$ /year
G	$\pm 1 \times 10^{-7}$ /year

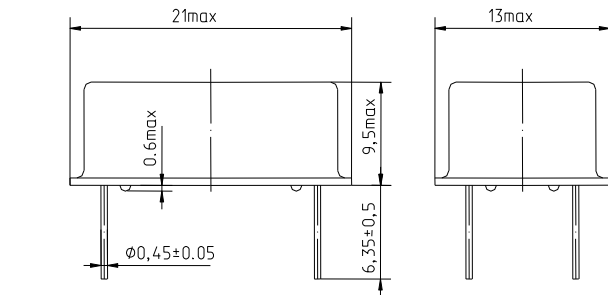
Phase noise, dBc/Hz (for 80-100 MHz)					
Option	1	2	3	4	5
Power Supply, V	3.3	3.3-5.0	5.0	5.0	5.0
10 Hz	-80	-85	-90	-92	-95
100 Hz	-115	-120	-125	-127	-127
1000 Hz	-140	-145	-150	-152	-153
10000 Hz	-150	-155	-162	-165	-167
100000 Hz	-160	-163	-165	-168	-170

A – available, NA – not available, C – consult factory

Phase noise, dBc/Hz (for 100-120 MHz)					
Option	1	2	3	4	5
Power Supply, V	3.3	3.3-5.0	5.0	5.0	5.0
10 Hz	-80	-85	-90	-92	-93
100 Hz	-115	-120	-122	-124	-125
1000 Hz	-140	-145	-149	-150	-150
10000 Hz	-150	-155	-162	-165	-166
100000 Hz	-160	-163	-165	-168	-169



Pin	Function
1	Control voltage input
2	Ground (case)
3	RF output
4	Power Supply



Power supply (Us)	3.3 V ±0.15V	5.0 V ±0.2V	
Steady state current consumption @ 25°C	< 250 mA	< 180 mA	
Peak current consumption during warm-up @ 25°C	< 500 mA	< 500 mA	
Frequency pulling range*	>±2.0x10 ⁻⁶	≥±2,5 x10 ⁻⁶	
Frequency stability vs. power supply changes	<±2x10 ⁻⁸		
Warm-up time within accuracy of <±2x10 ⁻⁷ @ 25°C ±2x10 ⁻⁷ , min	<2		
Output	HCMOS		SIN
	For 3.3V	For 5V	
-Logical «1», V	≥2.5	≥3.6	>500mV
-Logical «0», V	≤0.4	≤0.4	
Load	-		50 Omh
Fun-out	1		-
Harmonics	-		>20dB

* sufficient to compensate aging during life time

Shock:	
-Acceleration	100 g
-Storage temperature range	-55...+85 °C

Vibrations:	
Frequency range	10-2000 Hz
Acceleration	5 g

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	W	X
-60	-55	-50	-45	-40	-30	-20	-10	0	+10	+30	+40	+45	+50	+55	+60	+65	+70	+75	+80	+85



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