

ULTRA HIGH PERFORMANCE OCXO WITH LOW G-SENSITIVITY_MV272

Features:

- **Standard frequencies: 5.0; 10.0 MHz**
- **High stability vs. temperature: up to $\pm 1 \times 10^{-9}$**
- **Long term stability up to $\pm 2 \times 10^{-8}$ /year**
- **Low G - sensitivity**
- **ON/OFF function**
- **Low phase noise options**

G-sensitivity (in frequency range 0-500 Hz)	
-	Not specified
1	$< 1.0 \times 10^{-9}/g$
2	$< 1.5 \times 10^{-9}/g$
3	$< 0.5 \times 10^{-9}/g$ (consult factory)

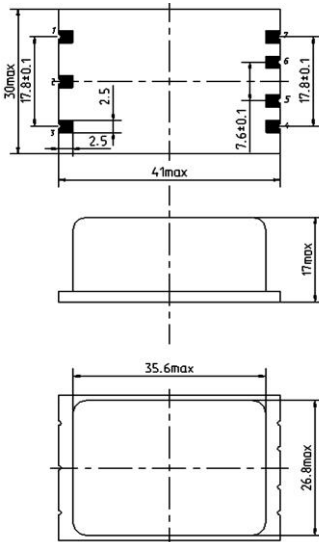
ORDERING GUIDE: MV272 -C 3 E-ULN-10.0MHz-2-LA

Availability of certain stability vs. operating temperature range (for 10 MHz)		$\pm 3 \times 10^{-9}$		
		3	2	1
A	0...+55°C	A	A	A
B	-10...+60°C	A	A	A
C	-20...+70°C	A	A	A
EX	-40...+85°C	A	A	C

A – available, C – consult factory

Availability of certain aging values for certain frequencies		Standard frequencies	
		5.0 MHz	10.0 MHz
F	$\pm 5 \times 10^{-8}$ / year	A	A
E	$\pm 3 \times 10^{-8}$ / year	A	A
D	$\pm 2 \times 10^{-8}$ / year	A	A

Package drawings:



Pin	Designation
1	GND
2	NC
3	RF
4	Us
5	ON OFF
6	U in
7	U ref

Not for reflow soldering

Vibrations:	
Frequency range	10-500 Hz
Option	10-2000 Hz
Acceleration	10 g
Shock:	
Acceleration	100 g ±3ms
Humidity @ 25 °C	
98%	
Storage temperature range	
-40...+85 °C	

Phase noise, dBc/Hz, for 10 MHz	-	LN	ULN*
1 Hz	<-100	<-105	<-110
10 Hz	<-130	<-135	<-140
100 Hz	<-155	<-155	<-157
1000 Hz	<-159	<-160	<-161
10000 Hz	<-160	<-161	<-162

* measured values

Short term stability (Allan deviation) per 1 sec, for 10 MHz:	< 3×10^{-12}
LA option	< 2×10^{-12}
ULA option	< 1×10^{-12}
Frequency stability vs. load changes (±5%)	< $\pm 5 \times 10^{-10}$
Optional	< $\pm 2 \times 10^{-10}$
Frequency stability vs. power supply changes (±5%)	< $\pm 5 \times 10^{-10}$
Optional	< $\pm 2 \times 10^{-10}$
Warm-up time within accuracy of $< \pm 2 \times 10^{-8}$ @ 25°C	<5 min
Power supply (Us)	12V±5%
Option	10.6...12.6V
Steady state current consumption @ +25°C (for 10 MHz)	<150 mA
Peak current consumption during warm-up **	<400 mA
Frequency pulling range (for 10 MHz)	$> \pm 4.0 \times 10^{-7}$
Control voltage range (Uin)	0...5 V
Reference voltage (Uref)	+5 V
Output	SIN
Level	>400 mV
Load	50 Ohm±5%
Harmonics	>30 dBc

** - for the oscillators with the lower operating temperatures $> -20^\circ$.

Additional notes:

- For non standard operating temperature ranges please use the following two letters designations (first letter for the lower limit, second letter for the upper limit), °C:

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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Due to continuous development and improvement Morion reserves the right to modify design or specifications of its products without prior notice.

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