

LOW-G PRECISION ULTRA LOW NOISY OCXO MV341M

Features:

- Standard frequency: 10.0 MHz
- Ultra low phase noise level close to the carrier
- Short term stability (Allan deviation) per 1 sec: $<5 \times 10^{-13}$
- Package size: 50.8x50.8x16 mm
- High stability vs. temperature: up to $\pm 1 \times 10^{-9}$
- High long term stability: up to $\pm 1 \times 10^{-8}$ /year
- Power supply: 12 V
- Improved G-sensitivity: up to $<4 \times 10^{-10}$
- Available as RoHS

ORDERING GUIDE: MV341M-C 2 D-10.0M-LN-1.5E-9/G

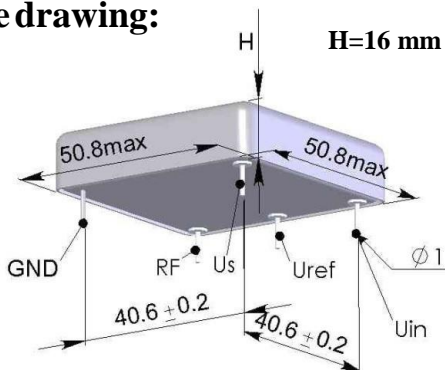
Availability of certain stability vs. operating temperature range		$\pm 5 \times 10^{-9}$	$\pm 3 \times 10^{-9}$	$\pm 2 \times 10^{-9}$	$\pm 1 \times 10^{-9}$
		5	3	2	1
A	0...+55°C	A	A	A	A
B	-10...+60°C	A	A	A	A
C	-20...+70°C	A	A	A	C
D	-40...+70°C	A	A	A	C
EU	-40...+75°C	A	A	C	C

A – available, C – consult factory

Availability of certain aging values for certain frequencies		10 MHz
F	$\pm 5 \times 10^{-8}$ /year	A
E	$\pm 3 \times 10^{-8}$ /year	A
D	$\pm 2 \times 10^{-8}$ /year	A
C	$\pm 1 \times 10^{-8}$ /year	C

Phase noise, dBc/Hz:	-	LN	ULN
0.01 Hz	-	-	≤ -37
0.1 Hz	< -80	< -85	≤ -88
1 Hz	< -113	< -116	$\leq -119..-120$
10 Hz	< -138	≤ -139	< -140
100 Hz	< -154	< -157	< -157
1000 Hz	< -160	< -160	< -163
10000 Hz	< -163	< -165	< -167

Package drawing:



Pin	OCXO's Pins Destinations
GND	Ground (case)
RF	RF output
Us	Power supply
Uref	Reference voltage output
Uin	Control voltage input or Not Connected

Vibrations:	
Frequency range	10-500 Hz
Acceleration	5 g
Shock:	75 g/ 3±1 ms
Humidity @ 25 °C	98%
Storage temperature range	-55...+85°C

Short term stability (Allan deviation) per 1 sec:	$< 5 \times 10^{-13}$ (5E-13)
Optionally for LN and ULN:	$< 3 \times 10^{-13}$ (3E-13)
Frequency stability vs. load changes (±5%)	$< \pm 5 \times 10^{-10}$
Frequency stability vs. power supply changes (±5%)	$< \pm 5 \times 10^{-10}$
Warm-up time within accuracy of $< \pm 2 \times 10^{-8}$ @ 25°C	< 5 min
Power supply (Us)	12 V ± 5%
Steady state current consumption @ +25°C	< 300 mA
Peak current consumption during warm-up	< 600 mA
Frequency pulling range	$> \pm 3 \times 10^{-7}$
Control voltage range (Uin)	0...5 V
Reference voltage (Uref)	+5 V
G-sensitivity	$< 1.5E-9/G$
Option	$< 1E-9/G$

Output	SIN
Level	> 400 mV
Load	50 Ohm ± 5%
Harmonics	> 30 dBc

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