PRECISION OCXO IN SMD PACKAGE MV295

Features:

- ***High stability vs. temperature: up to ±5x10^{-9}***
- ***Standard 25.4x22x12.5(10.0) mm SMD package***
- ***Oven alarm function***
- ***Power supply: 3.3V, 5V and 12V***
- ***Available as RoHS***
- ***Frequency range: 10.0 – 40.0 MHz***

Power supply
12 V
5 V
3.3 V

Output
HCMOS

Package type	
25.4x22x12.5 mm	C12.5
25.4x22x10 mm	C10

ORDERING GUIDE: MV295 - C 5 F – 12V - HCMOS - C12.5 - 10.0 MHz

Availability of certain stability vs. operating temperature range (for 10 MHz, 12 V)		± 5x10^{-8}	± 2x10^{-8}	± 1x10^{-8}	± 5x10^{-9}
		50	20	10	5
A	0…+55°C	A	A	A	A
B	-10…+60°C	A	A	A	C
C	-20…+70°C	A	A	A	C
D	-40…+70°C	A	A	C	C
EX	-40…+85°C	A	C	NA	NA

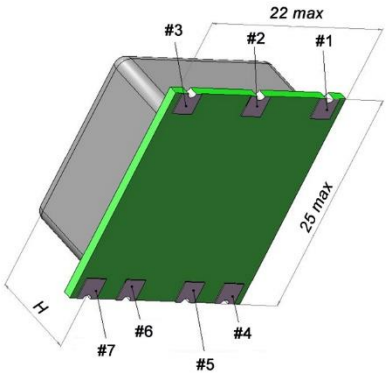
A – available, NA – not available, C – consult factory

For other temperature ranges see designation at the end of Data Sheet.

Availability of certain aging values for certain frequencies		Standard frequencies, MHz						
		10.0	12.8	15.36	16.384	20.0	25.0	30.72
H	±2x10^{-7}/ year	A	A	A	A	A	A	A
G	±1x10^{-7}/ year	A	A	A	A	C	C	C
F	±5x10^{-8}/ year	A	A	A	C	NA	NA	NA
E	±2x10^{-8}/ year	A	C	NA	NA	NA	NA	NA

Phase noise, dBc/Hz, for 10MHz, 5V and 12V	-
1 Hz	<-90
10 Hz	<-120
100 Hz	<-135
1000 Hz	<-145
10000 Hz	<-150

Package drawings:



Outputs designations

#1 – Us (Power supply);
#2 – Uref (Reference Voltage output);
#3 – Uin (Control Voltage input);
#4 – Rf output
#5 – Oven alarm;
#6 – NC;
#7 – GND (Ground).

Short term stability (Allan deviation) per 1 sec, for 10 MHz	<1x10^{-11}
Frequency stability vs. load changes (±5%)	<±3x10^{-9}
Frequency stability vs. power supply changes (±5%)	<±3x10^{-9}
Warm-up time within accuracy of <±1x10^{-7} @ 25°C	<3 min

Power supply (Us)	12V±5%	5V±5%	3.3V±5%
Steady state current consumption @ +25°C	<90 mA	<215 mA	<320 mA
Peak current consumption during warm-up (for "D" temp. range)	<220 mA	<530 mA	<800 mA
Frequency pulling range (for 10 MHz)	>±4.0x10^{-7}		
Control voltage range (Uin)	0…5 V	0…4.5V	0…2.8V
Reference voltage (Uref)	+5 V	+4.5 V	+2.8 V
Output	HCMOS		
Level	12V	>4.5 / <0.5V	
	5V	>4.0 / <0.5V	
	3.3V	>2.4 / <0.4V	
Load	10kOhm/15pF		
Rise/Fall time	<6 ns		
Harmonics	-		

Vibrations:	
Frequency range	10-500 Hz
Acceleration	5 g

Shock:	
Acceleration	75 g
Duration	3±1 ms

Humidity @ 25 °C	98%
Storage temperature range	-55…+85 °C

Additional notes:

- **Please consult factory for daily aging values. Normally typical correspondence of daily to aging per year is as following:**
- **±1x10^{-7}/year – ±1x10^{-9}/day; ±5x10^{-8}/year – ±5x10^{-10}/day; ±3x10^{-8}/year – ±3x10^{-10}/day**
- **Please mention RoHS requirement (if any) while requesting for quote or while placing PO.**
- **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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