

Datasheet

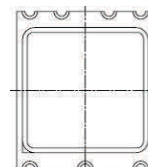
AXIOM15

OCXO IN SMD PACKAGE WITH SINE WAVE OUTPUT

FEATURES

- SMD holder size 25.6 x 22.2 x 13 mm.
- SINE WAVE output
- Till +/-5 ppb stability over temperature range
- Standard Frequency 10.00 MHz

25.6 x 22.2 x 13 mm max.



Parameter	min.	typ.	max.	Unit	Condition
Frequency range	10		120	MHz	
Standard frequencies		10.0000		MHz	
Frequency stability				ppm	
Initial tolerance @+25°C			± 500	ppb	@ V _C = 2.5 V
vs. operating temperature range (steady state)			± 100	ppb	Option II = "100"
			± 50	ppb	Option II = "50"
			± 25	ppb	Option II = "25"
			± 10	ppb	Option II = "10"
			± 5	ppb	Option II = "05"
operating temperature range	-10		+60	°C	Note 2
vs. supply voltage variation			± 10	ppb	
vs. load change			± 10	ppb	
Long term (aging) per day, after 30 days operation		± 1	± 10	ppb	Option II = "100"
long term (aging) 1 st year @ +40°C, after 30 days			± 200	ppb	Option II = "100"
			± 100	ppb	All other Options II
Frequency adjustment range					
Electronic Frequency Control (EFC)	± 2		± 5	ppm	Option II = "100"
	± 0.8	± 1		ppm	All other Options II
EFC voltage V _C	0.25	2.5	4.75	V	
EFC slope (Df / DV _C)		positive			
EFC input impedance	100			kΩ	
RF output					
Signal waveform		Sine wave			
Load		50		Ω	± 10 %
Output level	+3			dBm	Note 4
Harmonics			-20	dBc	
Warm-up time			5	min	Df _{final} /f ₀ < ±0.1 ppm
Supply voltage V _S	4.75	5.0	5.25	V	Option I = "50"
	11.6	12.0	12.6	V	Option I = "12"
Current consumption (steady state, @ +25°C)			200	mA	Option I = "50"
			100	mA	Option I = "12"
Current consumption (warm-up)			600	mA	Option I = "50"
			250	mA	Option I = "12"
Operable temperature range	-20		+70	°C	
Storage temperature range	-40		+85	°C	
Enclosure (see drawing) (LxWxH) Note3		25.6x22.2x13 max.		mm	IEC 61837 CO 28
Weight			10	gram	
Packing		Tape & reel			IEC 60286-3

Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
2. Other operating temperature range on request
3. Lower height H on request
4. Higher output level on request

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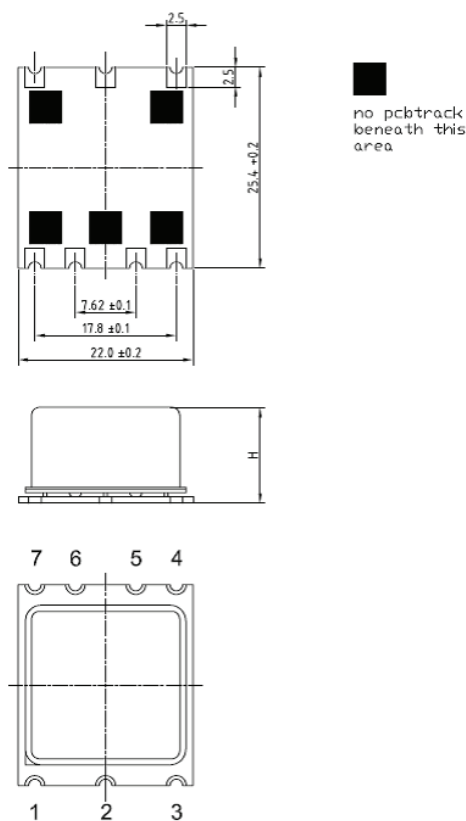
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OCXO IN SMD PACKAGE WITH SINE WAVE OUTPUT

Ordering Code:

Model (Specification)	Option I	Option II	Frequency [MHz]
AXIOM15	50	100	10.000

Enclosure drawing:



Pin connections

Pin #	Symbol	Function
1	V _C	Control Voltage (EFC)
2	N.C.	No Connection
3	V _S	Supply Voltage
4	RF OUT	RF Output
5	N.C.	No Connection
6	N.C.	No Connection
7	GND	Ground

Environmental conditions

Test	IEC 60068 Part ...	IEC 60679-1 clause ...	Test conditions
Sealing tests (if applicable)	2-17	4.6.2	Gross leak: Test Qc, Fine leak: Test Qk
Solderability	2-20	4.6.3	Test Ta (235 ± 5)°C Method 1
Resistance to soldering heat	2-58		Test Tb Method 1A, 5s
Shock*	2-27	4.6.8	Test Ea, 3 x per axes 100g, 6 ms half-sine pulse
Vibration, sinusoidal*	2-6	4.6.7	Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g
Endurance tests			
- ageing		4.7.1	30 days @ 85°C, OCXO @25°C
- extended aging		4.7.2	1000h, 2000h, 8000h @85°C

Other environmental conditions on request

Rev. 3.2 date 10-10-2012