

Specification	AXLE113A	Issue: 02	Date:2009-09-22
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Oscillator type : TCXO in SMD package

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	10 0.001		40 800	MHz MHz	(Clipped) Sine wave HCMOS
Frequency stability				ppm	
vs. temperature	± 0.5 ppm to ± 5 ppm			ppm	See tables 1 & 2
vs. supply voltage variation		± 0.1	± 0.3	ppm	V _S ± 5 %
vs. load change			± 0.2	ppm	Load ± 10 %
long term (aging) per year			± 1	ppm	@+40°C
Frequency adjustment range					
Mechanical (internal trimmer)	± 3			ppm	Option 1 = blank
Electronic Frequency Control (EFC)	± 5			ppm	Option 1 = "V"
EFC voltage V _C	0.15 0.5	1.65 2.5	3.15 4.5	V V	Option 2 = "3" Option 2 = "5"
EFC slope (Δf / ΔV _C)	positive				
EFC input impedance	100			kΩ	
RF output					
Signal waveform	Clipped Sine wave HCMOS				Option 3 = "C" Option 3 = "H"
Load	10 kΩ 10 pF 15 pF				Option 3 = "C" Option 3 = "H"
Amplitude	0.8 1.0			V p-p V p-p	Option 3 = "C" / 3.3 V Option 3 = "C" / 5.0 V
	According to relevant Logic Standard				Option 3 = "H"
Supply voltage V_s	3.15 4.75	3.3 5.0	3.45 5.25	V V	Option 2 = "3" Option 2 = "5"
Current consumption (Note 3)	2 ~ 4 15 ~ 100			mA mA	Option 3 = "C" Option 3 = "H"
Storage temperature range	-45		+90	°C	
Enclosure (see drawing) L x W x H	11.7 x 9.9 x 3.1 max.			mm	
Packing	Tape & reel				
Handling and Testing	In accordance with AXAN-011				www.axtal.com
Processing	In accordance with AXAN-012				www.axtal.com

Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
2. All combinations of options might not be available. Please consult factory
3. Depending on frequency and supply voltage

Frequency Stability over Temperature

Table 1

Code4	Stability
05	± 0.5
10	± 1.0
15	± 1.5
20	± 2.0
25	± 2.5
30	± 3.0
35	± 3.5
50	± 5.0

Table 2

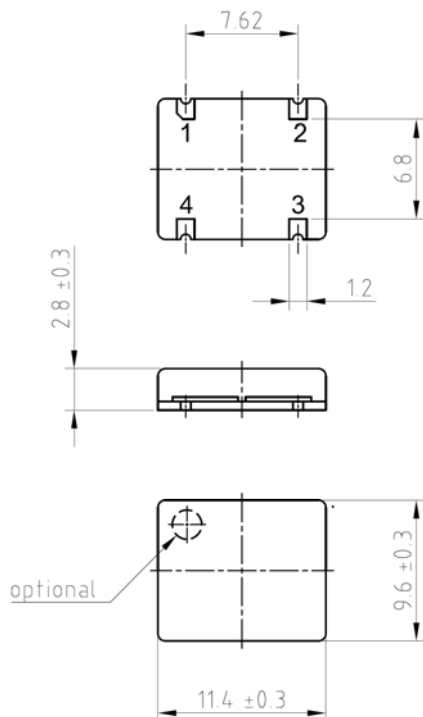
Lower Temperature		Upper Temperature	
Code5	Temp/°C	Code5	Temp/°C
0	0	A	+50
1	-10	B	+60
2	-20	C	+70
3	-30	D	+75
4	-40	E	+80
		F	+85

Ordering Code:

Part number	Option 1	Option 2	Option 3	Option 4	Option 5	Frequency [MHz]
	EFC	Supply Voltage	Output	Stability	Temp. range	
AXLE113A	_ or "V"	5 or 3	C, H	See tables 1 & 2		10.000

Example: AXLE113AV-5-C-10-3D -10.000 MHz

Enclosure drawing:



Pin connections

Pin #	Symbol	Function
1	V _C	Voltage Control (EFC)
2	GND	Ground
3	RF OUT	RF Output
4	V _S	Supply Voltage