AXTAL ADVANCED XTAL PRODUCTS

Specification	AXIS145	Issue: 01	Date:2008-05-31

Oscillator type : VCXO in CO27 package

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	10 1		50 800	MHz MHz	Sinewave HCMOS, PECL, LVDS
Frequency stability				ppm	
vs. temperature	± 10 ppm to ± 100 ppm			ppm	See tables 1 & 2
vs. supply voltage variation				ppm	
vs. load change				ppm	± 10 %
long term (aging) per year			± 3	ppm	@+40°C
Frequency adjustment range					
Electronic Frequency Control (EFC)	± 50 ± 100 ± 150			ppm ppm ppm	Option 5 = “5” Option 5 = “10” Option 5 = “15”
EFC voltage V_C	0.15 0	1.65 2.5	3.15 5	V V	Option 1 = “3” Option 1 = “5”
EFC slope ($\Delta f / \Delta V_C$)	Positive negative				Option 6 = blank Option 6 = “N” (Note 4)
EFC input impedance	100			kΩ	
RF output					
Signal waveform	Sine wave HCMOS PECL LVDS				Option 2 = “S” Option 2 = “H” Option 2 = “P” Option 2 = “L”
Load	50 Ω 15 pF 50 Ω + bias				Option 2 = “S” Option 2 = “H” Option 2 = “P” or “L”
Amplitude		0 +10		dBm dBm	Option 2 = “S” / 3.3 V Option 2 = “S” / 5.0 V
	According to relevant Logic Standard				Option 2 = “H”, “P”,“L”
Phase jitter (PECL & LVDS versions)			1.0	ps	12 kHz ~20 MHz
Supply voltage V_S	3.15 4.75	3.3 5.0	3.45 5.25	V V	Option 1 = “3” Option 1 = “5”
Current consumption (Note 3)	15 ~ 70 15 ~ 100 25 ~ 100			mA mA mA	Option 2 = “S” Option 2 = “H” Option 2 = “P” or “L”
Storage temperature range	-45		+90	°C	
Enclosure (see drawing) L x W x H	14.8 x 9.2 x 5.5.			mm	IEC60679-3 CO 27
Marking	AXIS145 Freq wwAXPyy				Specification Frequency ww=week, yy=year
Packing	Tape & reel				IEC 60286-3
Construction	Lead(Pb) -free				

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
4. Negative slope only available for HCMOS Output version (Option 2 = “H”)

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Frequency Stability over Temperature

Table 1

Code4	Stability
10	± 10
15	± 15
20	± 20
30	± 30
50	± 50
100	± 100

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

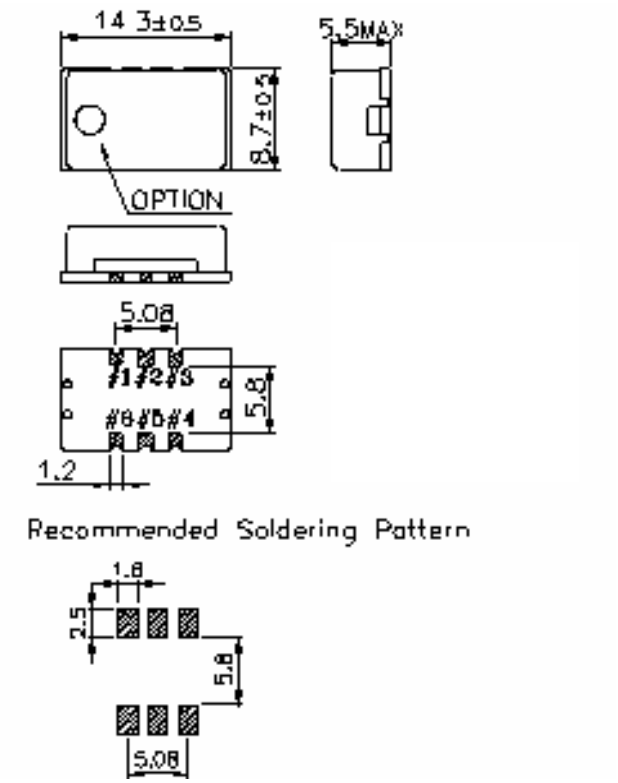
Ordering Code:

Part number	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6
	Supply Voltage	Output	Stability	Temp. range	Pulling range	Pulling slope
AXIS145	5 or 3	S, H, P, L	See tables 1 & 2		5, 10, 15	_ or "N"

All combinations of options might not be available. Please consult factory

Example: AXIS145-5-S-10-2C-5

Enclosure drawings



Pin connections

Sine wave and HCMOS

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

PECL and LVDS

Pin #	Symbol	Function
1	VC	Voltage Control (EFC)
2	N.C.	No Connection
3	GND	Ground
4	RF OUT	RF Output
5	CompOut	Complementary Output
6	VS	Supply Voltage