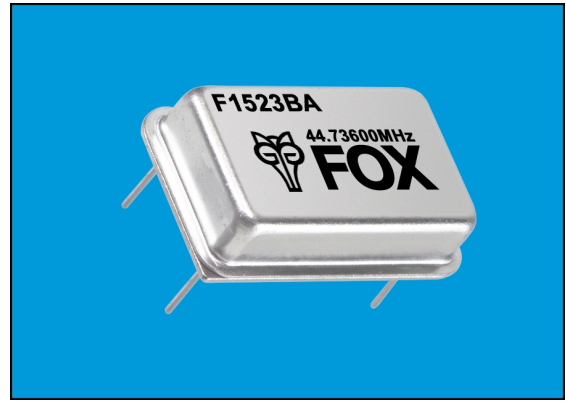


VOLTAGE CONTROLLED CRYSTAL OSCILLATOR

F1523BA

The Fox F1523BA is a low-cost VCXO. The Fox design meets or exceeds typical industry standard specifications & will also drive 8 TTL loads in the 30 ~ 54MHz range.



FEATURES

- Industry Standard
- Pullability
- Tight Stability
- Low Cost
- -40 ~ +85°C Option (F1523BAM)

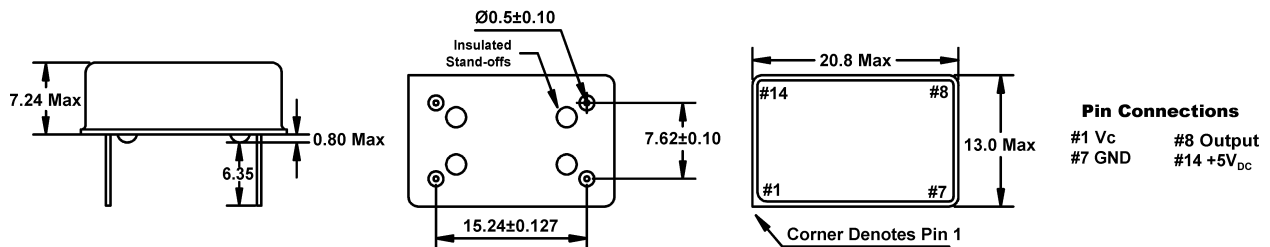
APPLICATIONS

- Phase-Locked Loops (PLLs)
- Synthesizers
- Frequency Modulation

• ELECTRICAL CHARACTERISTICS (V_{DD} = 5.0V, C_L = 15pF)

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (F _o)	1.000 ~ 54.000		1.000	54.000	MHz
Frequency Stability	1.000 ~ 54.000	All conditions *	-25	+25	PPM
Temperature Range	1.000 ~ 54.000				°C
Operating (TOPR)			0	+70	
Storage (TSTG)			-40	+125	
Supply Voltage (V _{DD})			+4.75	+5.25	V
Control Voltage (V _c)	1.000 ~ 54.000		+0.5	+4.5	V
Pullability	1.000 ~ 30.000	V _{DD} = 2.5V ± 2.0V	±100	±150	PPM
	30.000+ ~ 35.000		±100	±190	
	35.000+ ~ 54.000		±60	±120	
Input Current (I _{DD})	1.000 ~ 24.000			15	mA
	24.000+ ~ 30.000			20	
	30.000+ ~ 35.000			25	
	35.000+ ~ 54.000			30	
Output Symmetry	1.000 ~ 30.000	2.5V	45	55	%
	30.000+ ~ 54.000		40	60	
Rise Time (T _R)	1.000 ~ 30.000	1.0V ~ 4.0V		10	nS
Fall Time (T _F)	30.000+ ~ 54.000			5	
Output Voltage (V _{OL})	1.000 ~ 30.000	I _{OL} = 3.2mA I _{OL} = 12.8mA		0.5	V
	30.000+ ~ 54.000				
Output Current (I _{OH})	1.000 ~ 30.000	I _{OH} = -0.1mA I _{OH} = -1.0mA	4.5		
	30.000+ ~ 54.000				
Output Load	1.000 ~ 30.000	TTL Load		8	LS TTL
	30.000+ ~ 54.000		TTL Load		
Start-up Time (T _S)	1.000 ~ 54.000	HCMOS		15	pF
	30.000+ ~ 54.000			10	
Phase Noise	1.000 ~ 54.000	F _o + 1 kHz F _o + 10 kHz	-125 -130		dBc/Hz
Frequency					
Stability vs Voltage	1.000 ~ 54.000	V _{DD} = 5.0V ± 0.25V	-1.0	+1.0	PPM
Linearity	1.000 ~ 30.000		-5	+5	%
	30.000+ ~ 54.000		-10	+10	
Modulation Bandwidth	1.000 ~ 54.000		20		kHz

* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, vibration, and V_c = 2.5V.
All specifications subject to change without notice. 03/02/00



All dimensions are in millimeters.