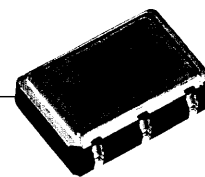
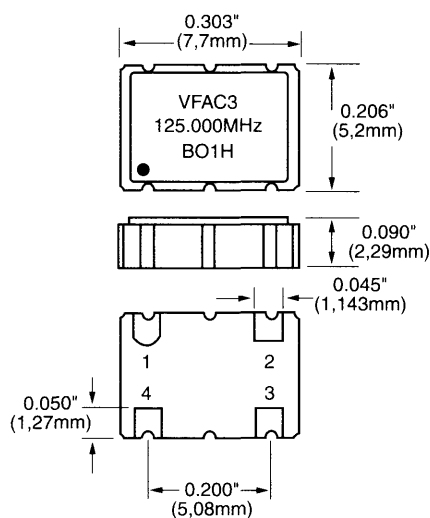


VFAC3

ACMOS/TTL Compatible
Surface Mount Clock Oscillators

FEATURES

- Very Low Phase Jitter
- Wide Frequency Range
- Miniature Ceramic Package
- EMI Shielded
- Tight Duty Cycle Available
- Wide Temperature Range Available
- Tristate Control Standard



All dimensions are typical unless otherwise specified.

Creating a Part Number

VFAC3 [] [] - [] - **FREQ.**

FREQUENCY STABILITY	
Code	Specification
S	±20 ppm
A	±25 ppm
B	±50 ppm
	±100 ppm (std.)

OPERATIONAL TEMP. RANGE	
Code	Specification
L	0°C to +70°C (std.)
1	-40°C to +85°C

DUTY CYCLE	
Code	Specification
HH	±2.5%
H	±5%
	±10%

INPUT VOLTAGE	
Code	Specification
L	3.3 Volt ±5%
	5.0 Volt ±5% (std.)

Example: VFAC3H-L-125MHz; Frequency Stability ±100ppm, Duty Cycle ±5.0%, Input Voltage 3.3 Volt ±5%, Operating Temperature 0°C to +70°C, Frequency 125.000MHz.

Parameter	Symp	Condition	Absolute Max. Ratings		Unit	Note
			Min	Typ		
Input Break Down Voltage	V _{cc}		-0.5		7.0	V
Storage Temp.	T _s		-55		+125	°C
Frequency Range	F		80		160	MHz
Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration			±100	ppm 1
Input Voltage	V _{cc}		4.75 3.15	5.00 3.30	5.25 3.45	V Std. LV Opt.
Input Current	I _{cc}	F = 100MHz 15pF load			60	mA 2
Load		10 TTL gates or 50pF Max., AC coupled 50 Ohm termination recommended				
Duty Cycle		@1.4V @ 50%V _{cc}	40 40	50 50	60 60	% % 3
Rise/Fall Time	T _r /T _f	0.4V to 2.4V 20% to 80%			1.5	ns
Logic "1" Level	V _{oh}	Max Load	0.9V _{cc}			V
Logic "0" Level	V _{ol}	Max Load			0.1V _{cc}	V
Start-up Time	T _s			2	10	ms
Phase Jitter		1σ			1	ps f _j >1KHz
Tristate Function		Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE				
Enable/Disable Time					100	ns 4
Operating Temperature Range		0°C to +70°C (-40°C to +85°C available)				
Mechanical Shock		Per MIL-STD-202, Method 213, Cond. E				
Thermal Shock		Per MIL-STD-883, Method 1011, Cond. A				
Vibration		Per MIL-STD-883, Method 2007, Cond. A				
Soldering Conditions		260°C, for 10s, Max. or 230°C, for 90 sec				
Hermetic Seal		Leak rate less than 5 x 10 ⁻⁸ atm.cc/s of helium				
Pin Out		Pin #1-Tristate Control Pin #3-Output Pin #2-Ground, Case Pin #4-Vcc				

Notes:

1. Standard frequency stability (±20, ±25, ±50, others available).
2. Current is load and frequency dependent.
3. Tighter duty cycle available.
4. Some versions enable time 10ns.

All specifications are subject to change without notice.