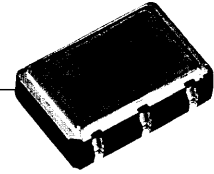


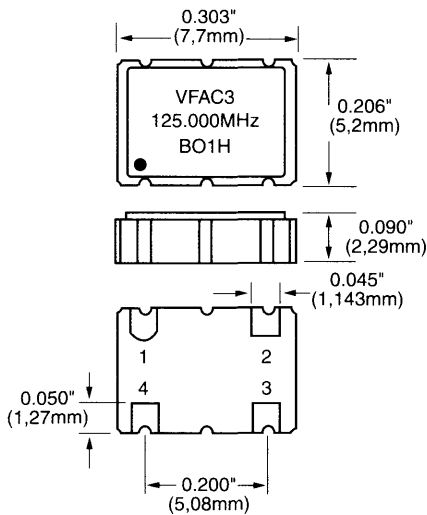
VFAC3



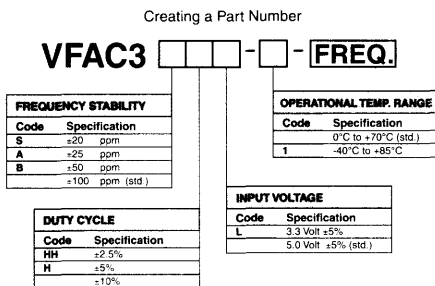
ACMOS/TTL Compatible Surface Mount Clock Oscillators

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.



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	Symb	Condition	Min	Typ	Max	Unit	Note	
Absolute Max. Ratings	Input Break Down Voltage	V _{cc}	-0.5		7.0	V		
	Storage Temp.	T _s	-55		+125	°C		
Electrical	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	
Environmental and Mechanical	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						
Electrical Connections	Pin Out	Pin #1-Tristate Control Pin #2-Ground, Case		Pin #3-Output Pin #4-V _{cc}				

- 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.