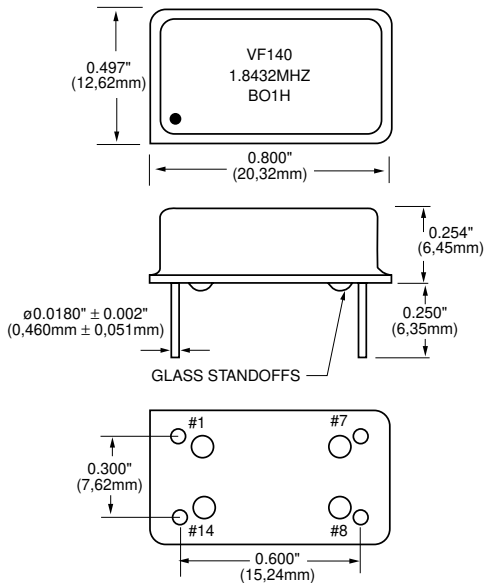


VF140

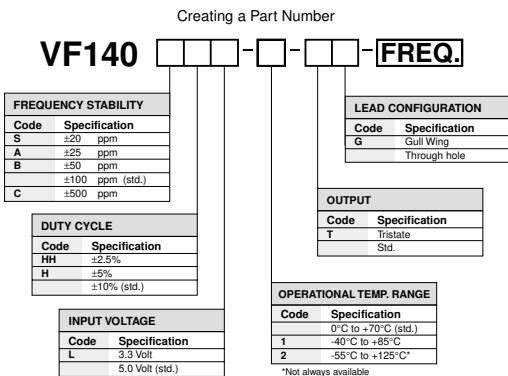
HCMOS/TTL Compatible
Clock Oscillators

FEATURES

- Tristate Output Available
- Low Cost
- Industrial and Military Temperature Available
- Wide Frequency Range
- Very Low Phase Jitter



All dimensions are typical unless otherwise specified.



Example: VF140BL-1-1.8432MHz: Frequency Stability ±50ppm, Duty Cycle ±10%, Input Voltage 3.3 Volt ±5%, Operating Temperature -40°C to +85°C, Output Non-Tristate, Lead Configuration Straight, Frequency 1.8432MHz.

	Absolute Max. Ratings						
	Parameter	Symb	Condition	Min	Typ	Max	Unit Note
Electrical	Input Break Down Voltage	V _{cc}		-0.5		7.0	V
	Storage Temp.	T _s		-55		+125	°C
Electrical	Frequency Range	F		0.2		130	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
	Input Current	I _{cc}	F = 50 MHz 15 pF load V _{cc} 5V			40	mA 2
	Load	10 TTL gates or 50 pF Max.					
	Duty Cycle		@ 1.4 V	40	50	60	% 3
	Rise/ Fall Time	T _r / T _f	0.4 V to 2.4 V 20% to 80%			1.5 4.0	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 > 1 KHz
	Tristate Function	Input HIGH (> 2.5 V) or floating: ACTIVE Input LOW (< 0.5 V): INFINITE IMPEDANCE					
Enable Time					100	ns	
Environmental and Mechanical	Operating Temperature Range	0°C to +70°C (-40°C to +85°C, -55°C to +125°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.					
Hermetic Seal	Leak rate less than 5 x 10 ⁻⁸ atm.cc/ s of helium						
Electrical Connections	Pin Out	Pin #1-Tristate Control or N/ C Pin #3-Output		Pin #2-Ground, Case Pin #4-V _{cc}			

Notes:

1. Standard frequency stability (±20, ±25, ±50, others available).
2. Current is load and frequency dependent.
3. Tighter duty cycles available.

All specifications are subject to change without notice.