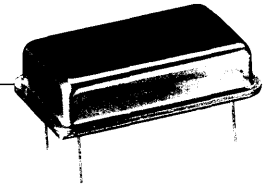
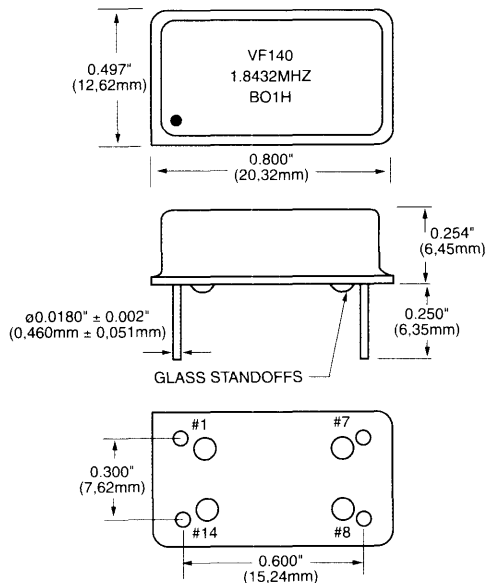


VF140

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.

Creating a Part Number

VF140 [] [] [] [] - [] - [] - [] - [] - FREQ.

FREQUENCY STABILITY	
Code	Specification
S	± 20 ppm
A	± 25 ppm
B	± 50 ppm
	± 100 ppm (std.)
C	± 500 ppm

DUTY CYCLE	
Code	Specification
WH	$\pm 2.5\%$
H	$\pm 5\%$
	$\pm 10\%$ (std.)

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

LEAD CONFIGURATION	
Code	Specification
G	Gull Wing
	Through hole

OUTPUT	
Code	Specification
T	Tristate
	Std.

OPERATIONAL TEMP. RANGE	
Code	Specification
1	0°C to +70°C (std.)
	-40°C to +85°C
2	-55°C to +125°C*

*Not always available

Example: VF140BL-1-1.8432MHz: Frequency Stability ± 50 ppm, Duty Cycle $\pm 10\%$, Input Voltage 3.3 Volt $\pm 5\%$, 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
	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	Std. LV Opt.
	Input Current	I _{cc}	F = 50MHz 15pF, load V _{cc} 5V			40	mA	2
	Load	10 TTL gates or 50pF Max.						
	Duty Cycle		@1.4V	40	50	60	%	3
	Rise/Fall Time	Tr/Tf	0.4V to 2.4V 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 >1KHz
	Tristate Function	Input HIGH (>2.5V) or floating: Input LOW (<0.5V):		ACTIVE 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						
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.