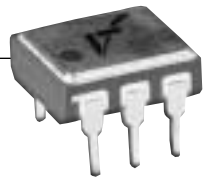
VF640

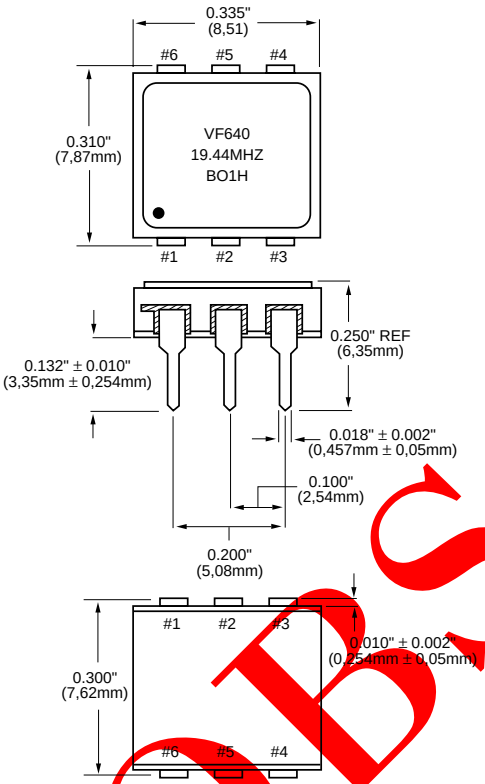


CMOS/TTL Compatible Clock Oscillator
Miniature 6 Pin Ceramic Package

***Not recommended for new designs**

FEATURES

- Very Low Phase Jitter
- Tristate Output Control
- Tight Duty Cycle Available



All dimensions are typical unless otherwise specified.

	Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Max. Ratings	Input Break Down Voltage	Vcc		–0.5		7.0	V	
	Storage Temp.	Ts		–55		+125	°C	
Electrical	Frequency Range	F		2.0		130	MHz	
	Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration			±100	ppm	1
	Input Voltage	Vcc		4.75 3.15	5.00 3.30	5.25 3.45	V	Std. LV Opt.
	Input Current	Icc	15pF load, 50MHz			40	mA	2
	Load	10 TTL gates or 50pF Max						
	Duty Cycle		@1.4V	40	50	60	%	3
	Rise/Fall Time	Tr/Tf	20% to 80% 0.4V to 2.4V			4.0 1.5	ns	
	Logic "1" Level	Voh	Max Load	0.9Vcc			V	
	Logic "0" Level	Vol	Max Load			0.1Vcc	V	
	Start–up Time	Ts			2	10	ms	
	Phase Jitter		1σ			1	ps	fj>1KHz
	Tristate Function	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE						
	Enable/ Disable Time	Te/Td				100	ns	

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 90s, Max
	Hermetic Seal	Leak rate less than 5 x 10^{-8} atm.cc/s of helium
Electrical Connections	Pin Out	Pin #1–N/C Pin #2–Tristate Control Pin #3–Ground, Case Pin #4–Output Pin #5–N/C Pin #6–Vcc

Notes:
1. Standard frequency stability, others available.
2. Current is load and frequency dependent.
3. Standard symmetry, tighter available.
4. Surface mount available, see VF640–G, VF640–L.

All specifications are subject to change without notice.

Creating a Part Number

VF640 □□□ – □ – **FREQ.**

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

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

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

DUTY CYCLE	
Code	Specification
H	±5%
	±10% (std.)

Example: VF640BHL-1-19.44MHz: Frequency Stability ±25ppm, Duty Cycle ±1.5%, Input Voltage 3.3 Volt ±5%, Operating Temperature -40°C to +85°C, Frequency 19.44MHz.

OBSOLETE