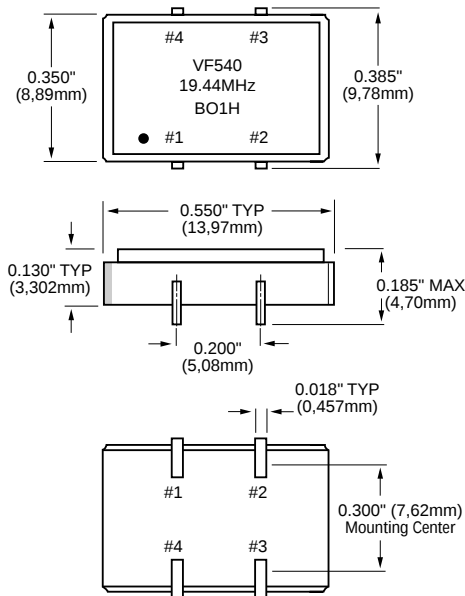


VF540

HCMOS/TTL Compatible
Surface Mount Clock Oscillators

FEATURES

- Very Low Phase Jitter at All Frequencies
- EMI Shielded
- Tight Duty Cycle Available
- Tristate Control Standard
- Industry Standard Footprint



All dimensions are typical unless otherwise specified.

Creating a Part Number

VF540 [] [] - [] - 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
2	-55°C to +125°C*

*Not always available

DUTY CYCLE	
Code	Specification
HH	±2.5%
H	±5%
	±10% (std.)

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

Example: VF540AHH-2-19.44MHz: Frequency Stability ±25ppm, Duty Cycle ±2.5%, Input Voltage 5.0 Volt ±5%, Operating Temperature -55°C to +125°C, Frequency 19.44MHz.

Absolute Max. Ratings	Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
	Input Break Down Voltage	Vcc		-0.5		7.0	V	
	Storage Temp.	Ts		-55		+125	°C	
Electrical	Frequency Range	F		1.5		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	Standard LV Opt.
	Input Current	Icc	15pF load, 50 MHz			40	mA	2
	Load		10 TTL gates or 50pF max.					
	Duty Cycle (Symmetry)		@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	Voh	Max Load	0.9Vcc			V	
	Logic "0" Level	Vol	Max Load			0.1Vcc	V	
	Start-up Time	Ts			2	10	ms	
Environmental and Mechanical	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	
	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					
Electrical Connections	Soldering Conditions		260°C, for 10s, Max; 230°C, for 90s, Max.					
	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. Up to ±20ppm available.
2. Current is load and frequency dependent.
3. Standard symmetry, tighter available.

All specifications are subject to change without notice.