

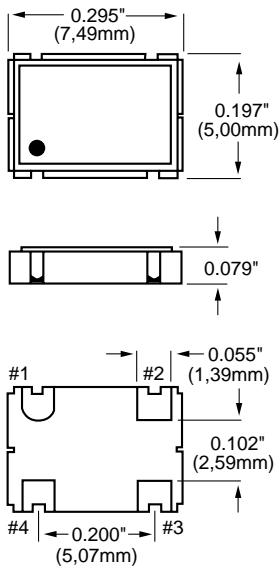
## VF3



# VF3 Series Miniature Ceramic SMD Tristate Oscillator HCMOS–TTL Compatible

## FEATURES

- Miniature Ceramic Package
- Wide Frequency Range
- Industrial Temperature Available



All dimensions are typical unless otherwise specified.

Creating a Part Number

VF3  -  -  - **FREQ.**

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

OPERATIONAL TEMP. RANGE	
Code	Specification
	-10°C to +70°C
1	-40°C to +85°C*

SYMMETRY	
Code	Specification
H	±5.0%
	±10.0%

Example: VF3SH-1-50.0MHz; Frequency Stability ±20ppm, Symmetry ±5%, Operating Temperature -40°C to +85°C, Frequency 50MHz.

		Parameter	Symb	Condition	Min	Typ	Max	Unit	Note	
Absolute Max. Ratings	Electrical	Input Break Down Voltage	V <sub>cc</sub>		-0.5		7.0	V		
		Storage Temp.	T <sub>s</sub>		-55		+125	°C		
		Frequency Range	F		1.8		160	MHz		
Electrical	Electrical	Frequency Stability	ΔF/F	Overall	-100		100	ppm	1	
		Input Voltage	V <sub>cc</sub>		3.15	3.3	3.45	V		
		Input Current	I <sub>cc</sub>	15pF load		10 15 18 28			mA	to 25MHz to 50MHz to 67MHz to 125MHz
		Load	10 LS-TTL gates or 15pF typical							
		Duty Cycle		@50%V <sub>cc</sub>	45 40	50 50	55 60	%		to 50MHz
		Rise/Fall Time	T <sub>r</sub> /T <sub>f</sub>	10% to 90%		5	10	ns		
		Logic "1" Level	V <sub>oh</sub>	Loaded, overall	.9V <sub>cc</sub>				V	
		Logic "0" Level	V <sub>ol</sub>	Loaded, overall			.1V <sub>cc</sub>		V	
		Enable Input Disable Input	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE							
		Start-up Time	T <sub>s</sub>			3	10	ms		
Environmental and Mechanical	Environmental and Mechanical	Operating Temperature Range	-10°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; 230°C, for 90s, Max.							
		Hermetic Seal	Leak rate less than 5 x 10 <sup>-8</sup> atm.cc/s of helium							
Electrical Connections	Electrical Connections	Pin Out	Pin #1–Tristate Control Pin #3–Output		Pin #2–Case, GND Pin #4–V <sub>cc</sub>					

Note: Please consult factory for available stabilities for your selected frequency requirements.

All specifications are subject to change without notice.