

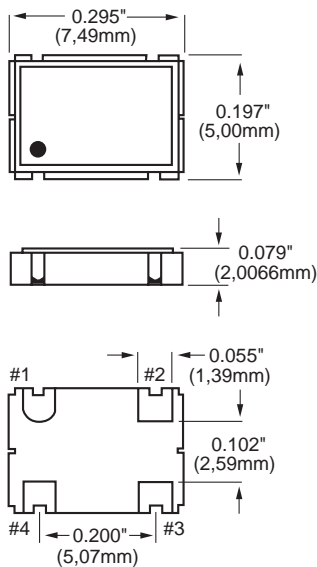
## VF3



# VF3 Series Miniature Ceramic SMD Tristate Oscillator HCMOS/LSTTL Compatible (5 x 7,5mm)

## 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
	0°C to +70°C
1	-40°C to +85°C*

DUTY CYCLE	
Code	Specification
H	±5.0%
	±10.0% (std.)

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

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Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
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		170	MHz	
Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration	-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 133MHz
Load		10-LSTTL gates or 15pF typical, 30pF Max					2
Duty Cycle		@50%V <sub>cc</sub>	40	50	60		
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>				15	ms	
Phase Jitter		Pk-Pk			6	ps	
Enable/Disable Time					100	ns	
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>-6</sup> atm.cc/s of helium					
Pin Out		Pin #1-Tristate Control Pin #3-Output	Pin #2-Case, GND Pin #4-V <sub>cc</sub>				

Note:

1. Standard frequency stability (±20, ±25, ±50, others available).

2. Frequency dependant

All specifications are subject to change without notice.

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09/02