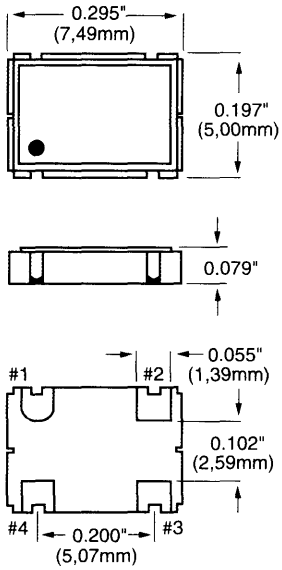
VF5

VF5 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.

	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		1.8		80	MHz	
	Frequency Stability	ΔF/F	Overall	–100		100	ppm	1
	Input Voltage	Vcc		4.75	5.00	5.25	V	
	Input Current	Icc	15pF load		25 45 65		mA	to 25MHz to 50MHz to 80MHz
	Load	10-TTL gates or 15pF typical (50pF max.)						
	Duty Cycle		@50%Vcc	45	50	55	%	
	Rise/Fall Time	Tr/Tf	10% to 90%		5	10	ns	
	Logic "1" Level	Voh	Loaded, overall	.9Vcc			V	
	Logic "0" Level	Vol	Loaded, overall			.1Vcc	V	
	Tristate Function	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE						
	Start–up Time	Ts			3	10	ms	
	Enable/ Disable Time					100	ns	
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^{-8} atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1–Tristate Control Pin #3–Output	Pin #2–Case, GND Pin #4–Vcc					

Notes:
1. ±50ppm and ±25ppm stability available up to 50MHz for –10°C to 70°C operating temperature range.
2. For ±50ppm stability option add "B" to the part number, for ±25ppm add "A".
3. For industrial temperature range option (–40°C to 85°C) add "–1" to the part number.

All specifications are subject to change without notice.

Creating a Part Number

VF5 [ ][ ] - [ ] - **FREQ.**

FREQUENCY STABILITY		
Code	Specification	
A	±25	ppm
B	±50	ppm
	±100	ppm
C	±500	ppm

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

SYMMETRY	
Code	Specification
H	±5.0%
	±10.0%

Example: VF5SH-1-50.0MHz: Frequency Stability ±20ppm, Symmetry ±5%, Operating Temperature -40°C to +85°C, Frequency 50MHz.