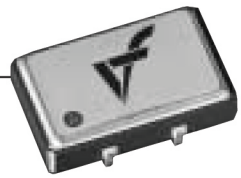
VF561

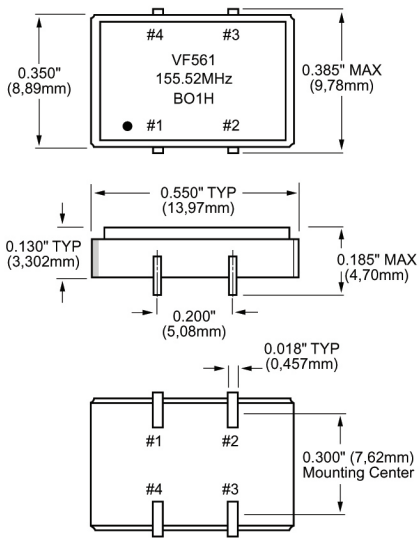
RoHS 6/6



PECL Compatible
Surface Mount Clock Oscillator

FEATURES

- Wide Frequency Range
- Very Low Phase Jitter
- EMI Shielded
- Tight Duty Cycle Available
- Industrial Temperature Range (–40°C to +85°C) Available
- Miniature Ceramic Package
- Industry Standard Footprint
- Complementary Output



All dimensions are typical unless otherwise specified.

Creating a Part Number

VF561 □□□ - □ - 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

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

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

Example: VF561AL-1-200MHz: Frequency Stability ±25ppm, Duty Cycle ±5.0%, Input Voltage 3.3 Volt ±5%, Operating Temperature -45°C to +85°C, Frequency 200.000MHz.

	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		15		300	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	PECL LVPECL
	Input Current	Icc	50 Ohm Load			60	mA	
	Load	50 Ohm to Vcc–2V or Thevenin Equivalent, Bias Required						
	Duty Cycle		@ 50% output swing	45	50	55	%	2
	Rise/Fall Time	Tr/Tf	20% to 80%			1.5	ns	
	Logic "1" Level	Voh	@Vcc = 5.0V @Vcc = 3.3V	4.04 2.59		4.19 2.74	V	PECL LVPECL
	Logic "0" Level	Vol	@Vcc = 5.0V @Vcc = 3.3V	3.15 1.45		3.25 1.55	V	PECL LVPECL
	Start–up Time	Ts			2	10	ms	
	Phase Jitter		1σ			1	ps	fj>1KHz

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–Complementary Output Pin #2–Ground, Case Pin #3–Output Pin#4–Vcc

Notes:
1. Standard frequency stability (±20, ±25, ±50, others available).
2. Tighter duty cycle available.

All specifications are subject to change without notice.