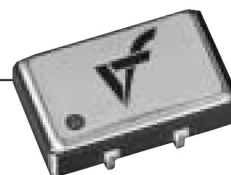


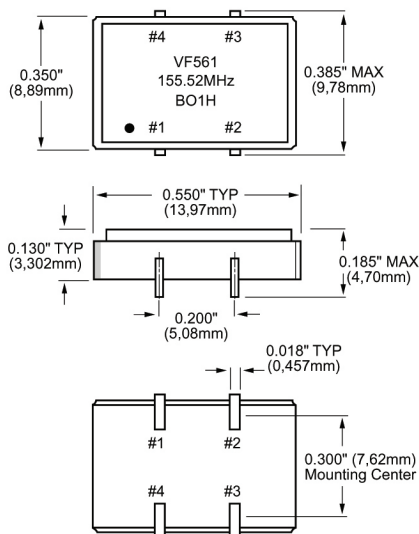
VF561

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		OPERATIONAL TEMP. RANGE	
Code	Specification	Code	Specification
S	±20 ppm		0°C to +70°C (std.)
A	±25 ppm	1	-40°C to +85°C
B	±50 ppm		
	±100 ppm (std.)		
C	±500 ppm		

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
Input Break Down Voltage	V _{cc}		-0.5		7.0	V	
Storage Temp.	T _s		-55		+125	°C	
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	V _{cc}		4.75 3.15	5.00 3.30	5.25 3.45	V	PECL LVPECL
Input Current	I _{cc}	50 Ohm Load			60	mA	
Load	50 Ohm to V _{cc} -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	V _{oh}	@V _{cc} = 5.0V @V _{cc} = 3.3V	4.04 2.59		4.19 2.74	V	PECL LVPECL
Logic "0" Level	V _{ol}	@V _{cc} = 5.0V @V _{cc} = 3.3V	3.15 1.45		3.25 1.55	V	PECL LVPECL
Start-up Time	T _s			2	10	ms	
Phase Jitter		1σ			1	ps	f _j >1KHz

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

Pin Out	Pin #1-Complementary Output Pin #2-Ground, Case	Pin #3-Output Pin #4-V _{cc}
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Notes:

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

All specifications are subject to change without notice.