

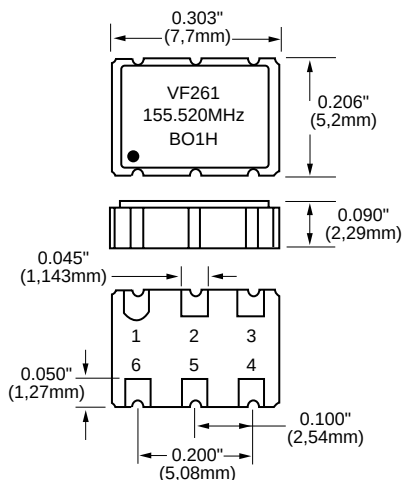
VF261 Series

PECL Compatible Crystal 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

VF261 [] [] - [] - **FREQ.**

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

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

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

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

Example: VF261AL-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	V _{cc}		-0.5		7.0	V	
	Storage Temp.	T _s		-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	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	T _r /T _f	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
Environmental and Mechanical	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.						
Electrical Connections	Hermetic Seal	Leak rate less than 5 x 10 ⁻⁸ atm.cc/s of helium						
	Pin Out	Pin #1-NC Pin #4-Output Pin #2-NC Pin#5-Complementary Output Pin #3-Ground, Case Pin#6-V _{cc}						

Notes:

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

All specifications are subject to change without notice.