

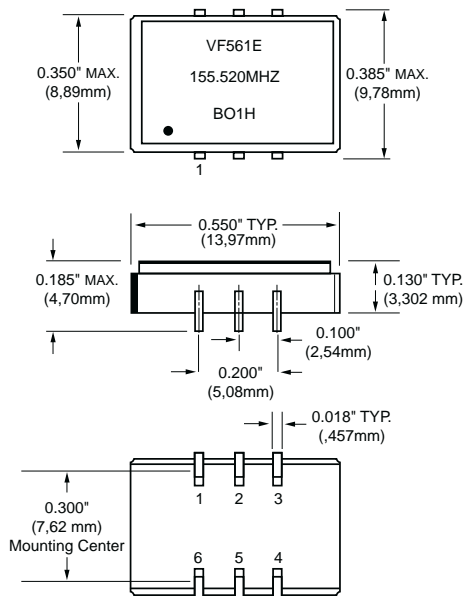
# VF561E Series

## ECLiPS™ Compatible Crystal Clock Oscillator



### FEATURES

- Wide Frequency Range
- EMI Shielded
- "J" Lead Termination
- Tight Duty Cycle Available
- Industrial Temperature Range (-40°C to +85°C) Available
- Miniature Ceramic Package
- Industry Standard Footprint
- Complementary Output
- Enable/Disable-Standard



All dimensions are typical unless otherwise specified.

Creating a Part Number

**VF561E** [ ] [ ] [ ] - [ ] - **[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	2	-55°C to +125°C *
	±100 ppm (std.)		
C	±500 ppm		

\* Not always available

DUTY CYCLE		INPUT VOLTAGE	
Code	Specification	Code	Specification
HH	±2.5%	L	3.3 Volt
	±5% (std.)		5.0 Volt (std.)

Example: VF561EA-1-155.52MHz: Frequency Stability ±25ppm, Duty Cycle ±5.0%, Input Voltage 3.3 Volt ±5%, Operating Temperature -40°C to +85°C, Frequency 155.52 MHz.

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	19		300	MHz		
	Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration	-100		±100	ppm	1
	Input Voltage	Vcc		4.75 3.15	5.00 3.30	5.25 3.45	V	PECL LVPECL
	Input Current	Icc	Loaded			80	mA	
	Load	50 Ohm to Vcc-2V or Thevenin Equivalent, Bias Required						
	Duty Cycle		@ 50% Vcc	45	50	55	%	1
	Rise/Fall Time	Tr/Tf	20% to 80%			0.6	ns	
	Logic "1" Level	Voh	@Vcc = 5.0V @Vcc = 3.3V	4.04 2.275		4.19 2.42	V	PECL LVPECL
	Logic "0" Level	Vol	@Vcc = 5.0V @Vcc = 3.3V	3.15 1.49		3.25 1.68	V	PECL LVPECL
	Start-up Time	Ts			2	10	ms	
Enable/Disable Function	Input HIGH (>2.5V): Disabled Input LOW (<0.5V) or floating: Active							
Enable/Disable Time	Te/Td				100	ns		
Phase Jitter		1σ			1	ps	fj>100Hz	
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 <sup>-8</sup> atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1- N/C Pin #2- Enable/Disable Pin #3- Ground		Pin #4- Out Pin #5- Out Pin #6- Vcc				

Notes:

1. Tighter duty cycle available.

All specifications are subject to change without notice.