VITE TECHNOLOGY EXPRESS
A VECTRON INTERNATIONAL COMPANY

Electrical Characteristics VVB Series Oscillator

Parameter	Symbol	Minimum		Typical		Maximum		Unit
		5.0 V	3.3 V	5.0 V	3.3 V	5.0 V	3.3 V	
Frequency Range	f_0	1		-		160		MHz
Operating Temperature Range	T_0	0 to 70 or -40 to 85						°C
Storage Temperature	T_S	-55 to 125						°C
Stability Options[1]		± 25, ± 50, ± 100						PPM
Supply Voltage	V_{DD}	4.5	3.0	5.0	3.3	5.5	3.6	V
Supply Current								
1.0 to 20 MHz	I_{DD}	-		-		20	20	mA
20.1 to 30 MHz		-		-		40	40	
30.1 to 160 MHz		-		-		50	50	
Voltage Control Range								
0.5 V to 4.5 V		±50				±200		PPM
0.3 V to 3.0 V			±50				±200	PPM
Linearity		5	5	10	10	20	20	%
Output Levels								
High	V_{OH}	4.5	3.0	-				V
Low	V_{OL}			-		0.5	0.3	V
Jitter (Peak-to-Peak)								
1.0 to 40 MHz	$t_{R/F}$	-		-		80	80	ps
40.1 to 160 MHz		-		-		150	150	
Tri-state (Input to Pin 1)								
Output Enable		4.0	2.0	-				V
Output Disable (High Imp)				-		0.8	0.5	V
Output Symmetry/Duty Cycle	-	60/40						%
Start-up Time	t_{SU}	-				20		ms
Output Load Options	-	TTL or HCMOS, 15 or 50 pF						-

1. Inclusive of operating temperature, supply voltage, and load.

Parameter	Description
Mechanical Shock	MIL-STD 883 Method 2022.3, Test A
Mechanical Vibration	MIL-STD 883 Method 2007.1, Test A
Temperature Cycle	MIL-STD 883 Method 1010, Test A
Gross Leak Test	All units 100% leak tested in deionized water
Fine Leak Test	All units tested to MIL-STD 883, Method 1014
Resistance to Solvents	MIL-STD-883, Method 2015