

Electrical Characteristics VPA1 Series Oscillator									
Parameter	Symbol	Minimum		Typical		Maximum		Unit	
		3.3 V	5.0 V	3.3 V	5.0 V	3.3 V	5.0 V		
Frequency Range	$f_0$	1.544		-		125		MHz	
Operating Temperature Range	$T_0$	0 to 70 or -40 to 85						°C	
Storage Temperature	$T_s$	-55 to 125						°C	
Stability Options <sup>1</sup>		± 50, ± 100						PPM	
Supply Voltage	$V_{DD}$	3.3 (±10%) or 5.0 (±10%)						V	
Supply Current	$I_{DD}$	-		-		28	45	mA	
Disable Current		-		-		16	30	mA	
Output Levels									
High with HCMOS Load	$V_{OH}$	$V_{DD} - 0.4$	$V_{DD} - 0.4$	-		-		V	
Low	$V_{OL}$	-	-	-		0.4		V	
Output Rise/Fall Time <sup>2</sup>	$t_{R/F}$	-		-		4		ns	
Tri-state (Input to Pin 1)									
Output Enable	$V_{IH}$	$0.7V_{DD}$	2	-		-	-	V	
Output Disable (High Imp)	$V_{IL}$	-	-	-		$0.2V_{DD}$	0.8	V	
Output Symmetry/Duty Cycle		40/60, 45/55 (Non Standard)						%	
Start-up Time	$t_{SU}$	-		-		10		ms	
Total Jitter								50	ps p-p
Output HCMOS Load									
1.544 to 66 MHz		-		-		15	50	pF	
66 to 125 MHz		-		-		15	15	pF	

1. Inclusive of calibration tolerance at 25°C, operating temperature, supply voltage, load, aging, shock and vibration
2. Transition times are measured between 10% and 90% of  $V_{DD}$ , with a maximum output load of 15 pF.

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	100% leak tested in deionized water
Fine Leak Test	MIL-STD 883, Method 1014
Resistance to Solvents	MIL-STD-883, Method 2015

