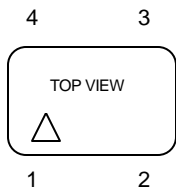


### Pin Information

Table 1. Pin Function		
Pin	Symbol	Function
1	Tri	Tristate
2	GND	Case Ground
3	Output	CMOS Output waveform
4	V <sub>DD</sub>	Power Supply Voltage (3.3 V ± 10%)



### Performance Characteristics

Table 2. Electrical Performance					
Parameter	Symbol	Minimum	Typical	Maximum	Units
Nominal Output Frequency	f <sub>0</sub>	-	106.250	-	MHz
Supply Voltage <sup>1</sup>	V <sub>DD</sub>	2.97	3.3	3.60	V
Operating Temperature Range	T <sub>OP</sub>	-10		+70	°C
Storage Temperature	T <sub>stor</sub>	-55		125	°C
Supply Current	I <sub>DD</sub>			50	mA
Output Voltage Levels (from V <sub>DD</sub> )					
High	V <sub>OH</sub>	3.0			V
Low	V <sub>OL</sub>			0.30	
Output Rise/Fall Time <sup>2</sup>	t <sub>R</sub> /t <sub>F</sub>			1.5	ns
Output Duty Cycle or Symmetry <sup>3</sup>	D	45	50	55	%
Stability over operating temperature/aging/ power supply	delta f/f <sub>0</sub>	-50		+50	ppm
Jitter, 12kHz to 20MHz, RMS	J		0.5	1	pS
Period Jitter <sup>4</sup> , RMS			1.1		
Cycle-Cycle Jitter <sup>4</sup> , RMS			1.8		
Start Up Time	T <sub>SU</sub>			10	mS
Tristate, Output in high impedance	Tri			0.5	V
Tristate, Output enabled <sup>5</sup>	Tri	2.0			V

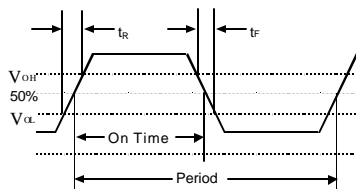
1. A 0.1 μF low frequency ceramic bypass capacitor in parallel with a 0.01 μF high frequency ceramic capacitor is recommended.

2. Figure 1 defines these parameters. Figure 2 illustrates the operating conditions.

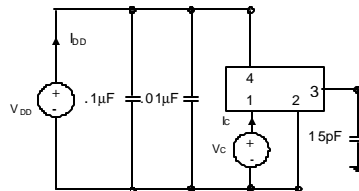
3. Duty cycle is defined as (on time/period) per Figure 1.

4. Measured using a TEK TDS7245D, 25K samples.

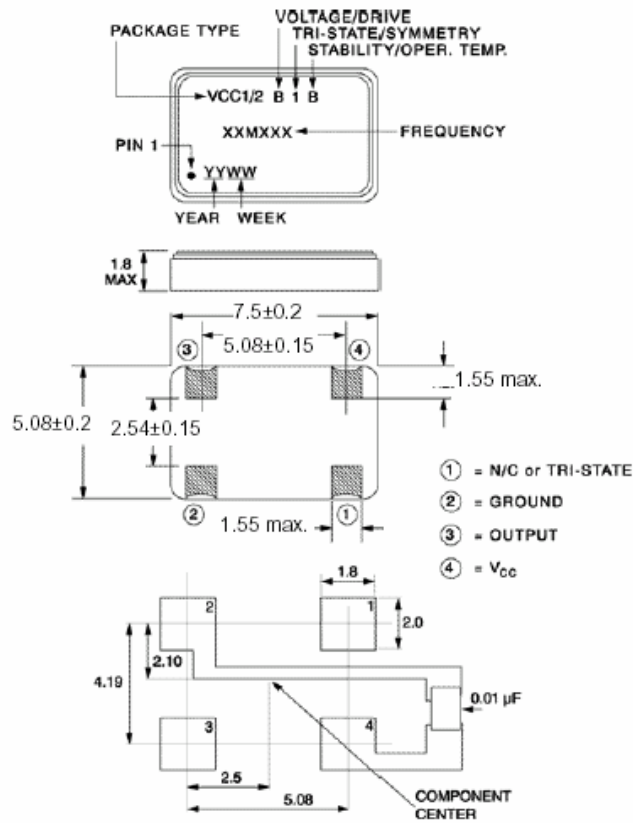
5. Output will be enabled with a no-connection on pin 2.



**Figure 1. Output Waveform**



**Figure 2. Output Test Conditions (25±5°C)**



**Figure 3. Outline Diagram and Pad Layout Recommendation**

Note: Devices will be marked VCC1-FIBS-106M25.

Table 3. Reliability	
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

**Ordering Information: VCC1-FIBS-106M250**

Standard reel size is 1000 per.

Table 4. Revision Control			
Revision History	Date	By	Description
-3	06/15/04	FBoudreau	Add cycle/cycle, period jitter data

**For Additional Information Please Contact:**



USA: Vectron International • 267Lowell Rd, Hudson, NH 03051 • Tel: 1-88-VECTRON-1 • Fax: 1-888-FAX-VECTRON  
 EUROPE: In Denmark, Finland, Ireland, Italy, Israel, Norway, Spain, UK: Tel: 44 (0) 1703 766 288 • Fax: 44 (0) 1703 766 822  
 In Austria, Belgium, France, Germany, Luxemburg, Netherlands, Sweden, Switzerland: Tel: 49(0)7263 6480 • Fax: 49(0)7263 6196  
 ASIA: In China, Taiwan, Japan: Tel: 01 603 598 0070 • Fax: 01 603 598 0075  
 In Korea, Singapore, Australia, India: Tel: 01 203 853 4433 • Fax: 01 203 853 1423

Vectron International reserves the right to make changes to the product(s) and/or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.