

# VHS5H(3H) SERIES

- 8 PIN DIP VCXO
- 5.0 and 3.3
- HCMOS Output
- Stability to  $\pm 25$ ppm



**ASCEND**

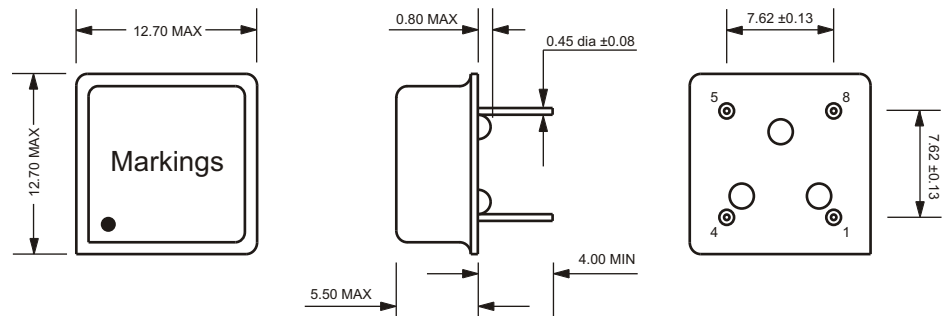
FREQUENCY DEVICES

## Electrical Specifications

Frequency Range:	-	1.000MHz to 220.000MHz
Frequency Stability:	-	$\pm 100$ ppm to $\pm 25$ ppm (Inclusive of Temperature, Load, Voltage and Aging)
Operating Temperature Range:	-	0°C to +70°C or -40°C to +85°C
Storage Temperature Range:	-	-55°C to +125°C
Supply Voltage (Vdd):	-	5.0Vdc $\pm 10\%$ or 3.3Vdc $\pm 10\%$
Supply Current:	Vdd = 5.0V  Vdd = 3.3V	20mA Max. (1MHz to 29.999MHz); 30mA Max. (30MHz to 35.999MHz); 45mA Max. (36MHz to 99.999MHz); 50mA Max. (100MHz to 150MHz); 80mA Max. (150MHz to 220MHz) 10mA Max. (1MHz to 29.999MHz); 15mA Max. (30MHz to 35.999MHz); 20mA Max. (36MHz to 99.999MHz); 25mA Max. (100MHz to 150MHz); 50mA Max. (150MHz to 220MHz)
Output Voltage HCMOS:	Logic 0 Logic 1	10% Vdd Maximum 90% Vdd Minimum
Control Voltage:	Vdd = 5.0V Vdd = 3.3V	2.50Vdc $\pm 2.0$ Vdc 1.65Vdc $\pm 1.5$ Vdc
Load Drive Capability:	-	10TTL Gates Maximum or 15pF CMOS
Rise/Fall Time:	20% to 80% of waveform	5nSec Maximum
Start Up Time:	-	5mSec Maximum

## Mechanical Dimensions

Pad	FUNCTION
1	Control Voltage
4	Case Ground
5	Output
8	Supply Voltage



### MARKING

Line 1: Ascend  
Line 2: XX.XXXR  
("R" Denotes RoHS Compliance)  
Line 3: XXXXXX (Date Code)

ALL DIMENSIONS  
IN MILLIMETERS

## Part Numbering Guide

**VHS 5H A 1 A A W - 33.000M**

### Series

8 Pin DIP VCXO

### Supply Voltage

5H = 5.0V  
3H = 3.3V

### Freq. Toler/Stab.

A =  $\pm 100$ PPM  
B =  $\pm 50$ PPM  
C =  $\pm 25$ PPM (Only available with 0°C to +70°C)

### Temperature Range

1 = 0°C to +70°C  
2 = -40°C to +85°C

### Frequency

### Linearity

W =  $\pm 20\%$  Max  
X =  $\pm 5\%$  Max  
Y =  $\pm 10\%$  Max  
Z =  $\pm 15\%$  Max

### Pullability

A =  $\pm 150$ ppm min  
B =  $\pm 100$ ppm min  
C =  $\pm 50$ ppm min  
D =  $\pm 100$ ppm to  $\pm 125$ ppm  
E =  $\pm 10$ ppm min  
F =  $\pm 100$ ppm to  $\pm 150$ ppm  
G =  $\pm 50$ ppm to  $\pm 100$ ppm  
H =  $\pm 75$ ppm min

### Duty Cycle

A = 40% / 60%  
B = 45% / 55%

\*\*5% linearity not available for frequencies >27MHz