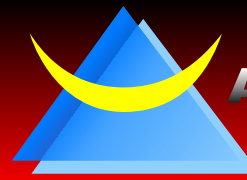


# OCA SERIES

- 5mm x 7mm Ceramic SMD
- 5.0, 3.3, 2.5, and 1.8 Volt
- HCMOS/TTL Output
- RoHS Compliant



**ASCEND**

FREQUENCY DEVICES

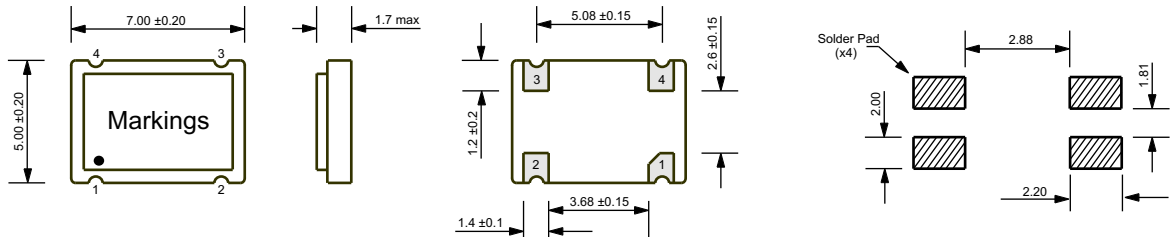
## Electrical Specifications

Frequency Range:	-	1.500MHz to 200.000MHz
Temperature Stability:	-	See Ordering Options Below (Inclusive of Temperature, Load, Voltage and First Year Aging(±5ppm))
Operating Temperature Range:	±5%	See Ordering Options Below
Storage Temperature Range:	-	-55°C to +125°C
Supply Voltage (Vdd):	-	5.0Vdc ±5%, 3.3Vdc ±5%, 2.5Vdc ±5%, or 1.8Vdc ±5%
Supply Current:	Vdd = 5.0V Vdd = 3.3V Vdd = 2.5V Vdd = 1.8V	70mA Maximum 40mA Maximum 35mA Maximum 15mA Maximum
Output Voltage HCMOS:	Logic 0 Logic 1	10% Vdd Maximum 90% Vdd Minimum
Duty Cycle:	50% of waveform	40%/60% Maximum or 45%/55% Maximum
Load Drive Capability:	5.0V (< 50MHz) 5.0V (> 50MHz) 3.3V (< 50MHz) 3.3V (> 50MHz) 2.5V and 1.8V	10TTL Gates or 50pF 10TTL Gates or 15pF 10TTL Gates or 30pF 10TTL Gates or 15pF 10TTL Gates or 15pF
Rise/Fall Time:	-	4nSec Maximum
Start Up Time:	-	10mSec Maximum
Standby Current	Disabled Output	10uA Maximum
RMS Phase Jitter	12KHz to 20MHz offset freq	1pSec Maximum
Tristate Function	No Connect V <sub>IH</sub> : ≥70% of V <sub>DD</sub> V <sub>IL</sub> : ≤30% of V <sub>DD</sub>	Output Enabled Output Enabled Output Disabled (High Impedance)

## Mechanical Dimensions

### MARKING

Line 1: Ascend  
Line 2: XX.XXX (Frequency)  
Line 3: XXXXXX (Date Code)



Pad	FUNCTION
1	Tri-State (E/D)
2	Ground / Case
3	Output
4	Supply Voltage

ALL DIMENSIONS  
IN MILLIMETERS

## Part Numbering Guide

**OCA 3H C 3 A - 33.000M - TR**

### Series

5 x7 Ceramic SMD

### Supply Voltage

5H = 5.0V (HCMOS)  
3H = 3.3V (HCMOS)  
2H = 2.5V (HCMOS)  
1H = 1.8V (HCMOS)

### Freq. Toler/Stab.

A = ±100PPM  
B = ±50PPM  
C = ±25PPM  
D = ±20PPM\*  
E = ±15PPM\*  
S = ±32PPM\*\*  
T = ±50PPM\*\*

\*0°C to +70°C Only

\*\*Includes 10 years aging

### Packaging

Blank = Bulk  
-TR = Tape and Reel

### Frequency

### Duty Cycle

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

### Temperature Range

1 = 0°C to +70°C  
2 = -20°C to +70°C  
3 = -40°C to +85°C

