

OC-32 Series

3.2X2.5X1.2mm / SMD / HCMOS/TTL Oscillator

Lead-Free
RoHS Compliant

CALIBER
Electronics Inc.

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

OC-32A- 100 48 A T - 30.000MHz	
Package	Pin One Connection
OC-32 = 3.3Vdc	T = Tri State Enable High
OC-32A = 1.8Vdc	Output Symmetry
OC-32B = 2.5Vdc	Blank = 40/60%, A = 45/55%
Inclusive Stability	Operating Temperature Range
100= +/-100ppm, 50= +/-50ppm, 30= +/-30ppm, 25= +/-25ppm, 20= +/-20ppm	Blank = -10°C to 70°C, 27 = -20°C to 70°C, 48 = -40°C to 85°C

ELECTRICAL SPECIFICATIONS

Revision: 2006-C

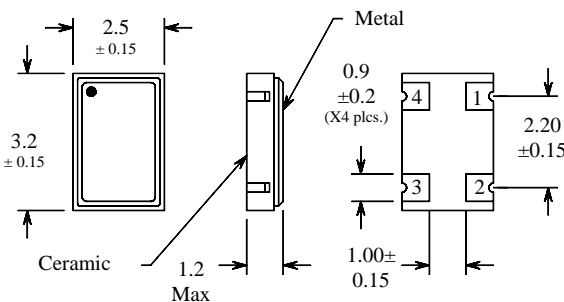
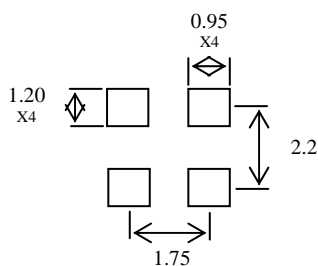
Frequency Range	1.544MHz to 80.000MHz / 32.768kHz (@ 3.3V)	
Operating Temperature Range	-10°C to 70°C / -20°C to 70°C / -40°C to 85°C	
Storage Temperature Range	-55°C to 125°C	
Supply Voltage	A=1.8Vdc / B=2.5Vdc / BLANK=3.3Vdc ±10%	
Input Current	1.544MHz to 32.000MHz and 32.768kHz 36,001MHz to 70.000MHz 70.001MHz to 125.000MHz	2mA Maximum (3.3v, 2.5v, 1.8v) 3mA Maximum (3.3v, 2.5v, 1.8v) 4mA Maximum (3.3v, 2.5v, 1.8v)
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load	±100ppm, ±50ppm, ±30ppm, ±25ppm, ±20ppm, (±50ppm for 32.768kHz only)
Output Voltage Logic High (Voh)	w/HCMOS or TTL Load	90% of Vdd Min. / Ioh=-8mA
Output Voltage Logic Low (Vol)	w/HCMOS or TTL Load	10% of Vdd Max. / Iol=8mA
Rise / Fall Time	10% to 90% of Waveform w/HCMOS Load; 0.4Vdc to 2.4V w/TTL Load / 6nSec Max.	
Duty Cycle	@1.4Vdc w/TTL Load; @50% w/HCMOS Load @1.4Vdc w/TTL Load or w/HCMOS Load	50 ±10% (Standard) 50±5% (Optional)
Load Drive Capability	15pF HCMOS Load	
Pin 1 Tristate Function	Pin 1 = H or Open / Output Active at pin 3 Pin 1 = L / High Impedance at pin 3	
Aging (@ 25°C)	±5ppm / year Maximum	
Start Up Time	10mSeconds Maximum	
Absolute Clock Jitter	±250pSeconds Maximum	
One Sigma Clock Jitter	±50pSeconds Maximum	

NOTE: A 0.01uF bypass capacitor should be placed between Vdd (Pin 4) and GND (Pin 2) to minimize power supply line noise.

MECHANICAL DIMENSIONS

Marking Guide

Recommended Solder Pattern



All Dimensions in mm.

Line 1: A, B or Blank - Frequency
Line 2: CEI YM

A = Voltage designator
CEI = Caliber Electronics Inc.
YM = Date Code (Year / Month)

Pin 1: Tri-State
Pin 2: Case Ground

Pin 3: Output
Pin 4: Supply Voltage (3.3v, 2.5v, 1.8v)