

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

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

ELECTRICAL SPECIFICATIONS

Revision: 2006-C

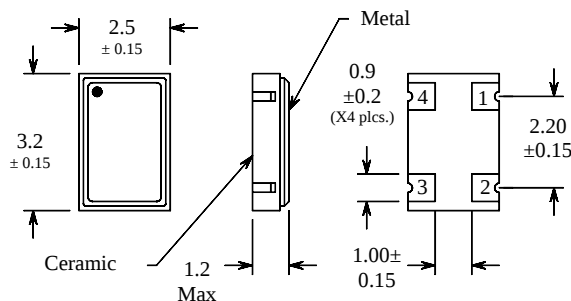
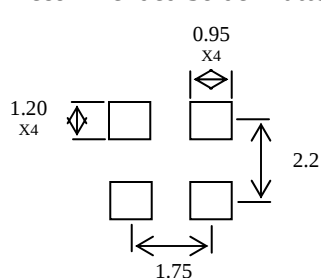
Frequency Range		1.544MHz to 80.000MHz / 32.768kHz (@ 3.3V)	
Operating Temperature Range		-10°C to 70°C / -20°C to 70°C / -40°C to 85°C	
Storage Temperature Range		-55°C to 125°C	
Supply Voltage		A=1.8Vdc / B=2.5Vdc / BLANK=3.3Vdc ±10%	
Input Current	1.544MHz to 32.000MHz and 32.768kHz	2mA Maximum	(3.3v, 2.5v, 1.8v)
	36,001MHz to 70.000MHz	3mA Maximum	(3.3v, 2.5v, 1.8v)
	70.001MHz to 125.000MHz	4mA Maximum	(3.3v, 2.5v, 1.8v)
Frequency Tolerance / Stability		±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)

TEL 949-366-8700

FAX 949-366-8707

WEB <http://www.caliberelectronics.com>