OC Series

5X7X1.6mm / SMD / HCMOS/TTL Oscillator

Lead-Free
RoHS Compliant

C A L I B E R
Electronics Inc.

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

OCH 100 48 A T - 30.000MHz

Package
OCH = 5X7X1.6mm / 5.0Vdc / HCMOS-TTL
OCC = 5X7X1.6mm / 5.0Vdc / HCMOS-TTL / Low Power
<25.000MHz=15mA max. / >24.000MHz=20mA max.
OCD = 5X7X1.7mm / 5.0Vdc and 3.3Vdc / HCMOS-TTL

Inclusive Stability
100= +/-100ppm, 50= +/-50ppm, 30= +/-30ppm, 25= +/-25ppm,
20= +/-20ppm, 15= +/-15ppm, 10= ±10ppm **(25,20,15,10= 0°C-70°C Only)**

Operating Temperature Range
Blank = 0°C to 70°C, 27 = -20°C to 70°C, 48 = -40°C to 85°C

Output Symmetry
Blank = 40/60%, A = 45/55%

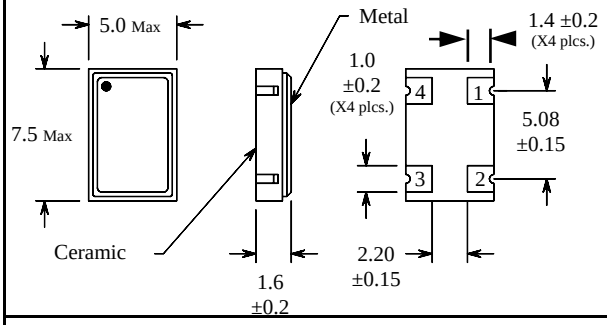
Pin One Connection
T = Tri State Enable High

ELECTRICAL SPECIFICATIONS

Revision: 1998-C

Frequency Range		1.544MHz to 156.520MHz
Operating Temperature Range		0°C to 70°C / -20°C to 70°C / -40°C to 85°C
Storage Temperature Range		-55°C to 125°C
Supply Voltage		5.0Vdc ±10%, 3.3Vdc ±10%
Input Current	1.544MHz to 36.000MHz 36,001MHz to 70.000MHz 70.001MHz to 125.000MHz	18mA Maximum 50mA Maximum 65mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load	±100ppm, ±50ppm, ±30ppm, ±25ppm, ±20ppm, ±15ppm or ±10ppm (25, 20, 15, 10 = 0°C to 70°C)
Output Voltage Logic High (Voh)	w/TTL Load w/HCMOS Load	2.4Vdc Minimum Vdd –0.5Vdc Minimum
Output Voltage Logic Low (Vol)	w/TTL Load w/HCMOS Load	0.4Vdc Maximum 0.5Vdc Maximum
Rise / Fall Time	10% to 90% of Waveform w/30pF HCMOS Load; 0.4Vdc to 2.4V w/10LSTTL Load 10nSec Max. </= 70.000MHz 10% to 90% of Wavefrom w/15pF HCMOS Load; 0.4Vdc to 2.4V w/10LSTTL Load 5nSec Max. .>70.000MHz 10% to 90% of Wavefrom w/50pF HCMOS Load; 0.4Vdc to 2.4V w/TTL Load 5nSec Max. .</=70.000MHz	
Duty Cycle	@1.4Vdc w/TTL Load; @50% w/HCMOS Load @1.4Vdc w/TTL Load or w/HCMOS Load @50% of Waveform w/LSTTL or HCMOS Load >66.667MHz	50 ±10% (Standard) 50±5% (Optional) 50±5% (Optional)
Load Drive Capability	</= 70.000MHz >70.000MHz </=70.000MHz (Optional)	10LSTTL Load or 30pF HCMOS Load 10LSTTL Load or 15pF HCMOS Load 10TTL Load or 50pF HCMOS Load
Pin 1 Tristate Input Voltage	No Connection V_{IH} V_{IL}	Enables Output +2.2Vdc Minimum to Enable Output +0.8Vdc Maximum to Disable Output
Aging (@ 25°C)		±5ppm / year Maximum
Start Up Time		10mSeconds Maximum
Absolute Clock Jitter		±100pSeconds Maximum
One Sigma Clock Jitter		±25pSeconds Maximum

MECHANICAL DIMENSIONS



All Dimensions in mm.

Marking Guide

Line 1: Frequency
Line 2: CEI YM

T = Tristate
CEI = Caliber Electronics Inc.
YM = Date Code (Year / Month)

Pin 1: Tri-State
Pin 2: Case Ground
Pin 3: Output
Pin 4: Supply Voltage