OEH, OEH3 Series

Plastic Surface Mount / HCMOS/TTL Oscillator

C A L I B E R
Electronics Inc.

PART NUMBERING GUIDE

Environmental/Mechanical Specifications on page F5

OEH 100 48 A T - 30.000MHz

Package
OEH = 14 Pin Dip / 5.0Vdc / HCMOS-TTL
OEH3 = 14 Pin Dip / 3.3Vdc / HCMOS-TTL

Inclusive Stability
100= +/-100ppm, 50= +/-50ppm, 30= +/-30ppm, 25= +/-25ppm, 20= +/-20ppm, 15= +/-15ppm, 10= ±10ppm

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%

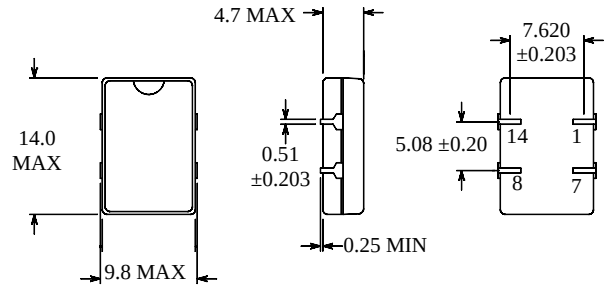
Pin One Connection
Blank = No Connect, T = Tri State Enable High

ELECTRICAL SPECIFICATIONS

Revision: 1995-B

Frequency Range		250kHz to 106.250MHz
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	250.000kHz to 24.000MHz 24.001MHz to 50.000MHz 50.001MHz to 66.667MHz 66.668MHz to 106.250MHz	30mA Maximum 45mA Maximum 60mA Maximum 80mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage and Load	±100ppm, ±50ppm, ±30ppm, ±25ppm, ±20ppm, ±15ppm or ±10ppm (20, 15, 10 = 0°C to 70°C Only)
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 Time **Fall Time**	0.4Vdc to 2.4Vdc w/TTL Load; 20% to 80% of Waveform w/HCMOS Load </=66.667MHz. 0.4Vdc to 2.4Vdc w/TTL Load; 20% to 80% of Waveform w/HCMOS Load >66.667MHz.	5nSeconds Maximum 3nSeconds Maximum
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	250.000kHz to 24.000MHz 24.001MHz to 66.667MHz 66.668MHz to 150.000MHz	10TTL or 50pF HCMOS Load 10TTL or 15pF HCMOS Load 10LSTTL or 15pF HCMOS Load
Pin 1 Tristate Input Voltage	No Connection VIH VIL	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



Pin 1: No Connect or Tri-State
Pin 7: Case Ground
Pin 8: Output
Pin 14: Supply Voltage

Marking Guide

Line 1: Blank or 3 - Frequency
Line 2: CEI YM

Blank = 5.0V
3 = 3.3V
CEI = Caliber Electronics Inc.
YM = Date Code (Year / Month)

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