

**PART NUMBERING GUIDE**

**Environmental/Mechanical Specifications on page F5**

**OCH 100 48 A T - 30.000MHz**

<p><b>Package</b></p> <p>OCH = 5X7X1.6mm / 5.0Vdc / HCMOS-TTL</p> <p>OCC = 5X7X1.6mm / 5.0Vdc / HCMOS-TTL / Low Power &lt;25.000MHz=15mA max. / &gt;24.000MHz=20mA max.</p> <p>OCD = 5X7X1.7mm / 5.0Vdc and 3.3Vdc / HCMOS-TTL</p> <p><b>Inclusive Stability</b></p> <p>100= +/-100ppm, 50= +/-50ppm, 30= +/-30ppm, 25= +/-25ppm, 20= +/-20ppm, 15= +/-15ppm, 10= ±10ppm (25,20,15,10= 0°C-70°C Only)</p>	<p><b>Pin One Connection</b></p> <p>T = Tri State Enable High</p> <p><b>Output Symmetry</b></p> <p>Blank = 40/60%, A = 45/55%</p> <p><b>Operating Temperature Range</b></p> <p>Blank = 0°C to 70°C, 27 = -20°C to 70°C, 48 = -40°C to 85°C</p>
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**ELECTRICAL SPECIFICATIONS**

<b>Frequency Range</b>	1.544MHz to 156.520MHz
<b>Operating Temperature Range</b>	0°C to 70°C / -20°C to 70°C / -40°C to 85°C
<b>Storage Temperature Range</b>	-55°C to 125°C
<b>Supply Voltage</b>	5.0Vdc ±10%, 3.3Vdc ±10%
<b>Input Current</b>	1.544MHz to 36.000MHz: 18mA Maximum 36.001MHz to 70.000MHz: 50mA Maximum 70.001MHz to 125.000MHz: 65mA Maximum
<b>Frequency Tolerance / Stability</b>	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 )
<b>Output Voltage Logic High (Voh)</b>	w/TTL Load: 2.4Vdc Minimum w/HCMOS Load: Vdd -0.5Vdc Minimum
<b>Output Voltage Logic Low (Vol)</b>	w/TTL Load: 0.4Vdc Maximum w/HCMOS Load: 0.5Vdc Maximum
<b>Rise / Fall Time</b>	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 Waveform w/15pF HCMOS Load; 0.4Vdc to 2.4V w/10LSTTL Load 5nSec Max. >70.000MHz 10% to 90% of Waveform w/50pF HCMOS Load; 0.4Vdc to 2.4V w/TTL Load 5nSec Max. <=/70.000MHz
<b>Duty Cycle</b>	@ 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)
<b>Load Drive Capability</b>	<=/ 70.000MHz: 10LSTTL Load or 30pF HCMOS Load >70.000MHz: 10LSTTL Load or 15pF HCMOS Load <=/70.000MHz (Optional): 10TTL Load or 50pF HCMOS Load
<b>Pin 1 Tristate Input Voltage</b>	No Connection VIH: Enables Output VIL: +2.2Vdc Minimum to Enable Output +0.8Vdc Maximum to Disable Output
<b>Aging (@ 25°C)</b>	±5ppm / year Maximum
<b>Start Up Time</b>	10mSeconds Maximum
<b>Absolute Clock Jitter</b>	±100pSeconds Maximum
<b>One Sigma Clock Jitter</b>	±25pSeconds Maximum

**MECHANICAL DIMENSIONS**

**Marking Guide on page F3-F4**

All Dimensions in mm.

The drawing shows three views of the oscillator package. The top view is a rectangle with a width of 5.0 Max and a height of 7.5 Max. The side view shows a height of 1.6 ±0.2. The pin detail view shows four pins with a pitch of 1.4 ±0.2 (X4 ples.). Pin 1 is the tri-state input, Pin 2 is the case ground, Pin 3 is the output, and Pin 4 is the supply voltage. The distance between Pin 3 and Pin 4 is 5.08 ±0.15. The distance between Pin 2 and Pin 3 is 2.20 ±0.15. The distance between Pin 1 and Pin 2 is 1.0 ±0.2 (X4 ples.).

<p>Pin 1: Tri-State Pin 2: Case Ground</p>	<p>Pin 3: Output Pin 4: Supply Voltage</p>
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