

**PART NUMBERING GUIDE**

**Environmental/Mechanical Specifications on page F5**

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

**Package**  
 OAT = 14 Pin Dip / 5.0Vdc / TTL  
 OAT3 = 14 Pin Dip / 3.3Vdc / TTL  
 OBT = 8 Pin Dip / 5.0Vdc / TTL  
 OBT3 = 8 Pin Dip / 3.3Vdc / TTL

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

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

**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

**ELECTRICAL SPECIFICATIONS**

Revision: 1994-E

Frequency Range	3.000MHz to 80.000MHz	
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	70mA 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)	2.4Vdc Minimum	
Output Voltage Logic Low (Vol)	0.4Vdc Maximum	
Rise Time / Fall Time	3.000MHz (0.4Vdc to 2.4Vdc) 4.001MHz to 25.000MHz (0.4Vdc to 2.4Vdc) 25.001MHz to 80.000MHz (0.4Vdc to 2.4Vdc)	15nSeconds Maximum 10nSeconds Maximum 6nSeconds Maximum
Duty Cycle	@1.4Vdc w/TTL Load	50 ±10% (Standard), 50±5% (Optional)
Load Drive Capability	3.000MHz to 25.000MHz 25.001MHz to 80.000MHz	10TTL Load Maximum 5TTL Load Mzximum
Pin 1 Tristate Input Voltage	No Connection V <sub>IH</sub> V <sub>IL</sub>	Enables Output +2.2Vdc Minimum to Enable Output +0.8Vdc Maximum to Disable Output
Aging (@ 25°C)	±5ppm / year Maximum	
Start Up Time	20mSeconds Maximum	
Absolute Clock Jitter	±100pSeconds Maximum	
One Sigma Clock Jitter	±25pSeconds Maximum	

**MECHANICAL DIMENSIONS**

Marking Guide on page F3-F4

**14 Pin Full Size**  
All Dimensions in mm.

**8 Pin Half Size**  
All Dimensions in mm.

Pin 1: No Connect or Tri-State Pin 7: Case Ground	Pin 8: Output Pin 14: Supply Voltage	Pin 1: No Connect or Tri-State Pin 4: Case Ground	Pin 5: Output Pin 8: Supply Voltage
--	---	--	--