OAT, OAT3, OBT, OBT3 Series

TRUE TTL Oscillator

Lead-Free
RoHS Compliant

C A L I B E R
Electronics Inc.

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

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

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

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

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

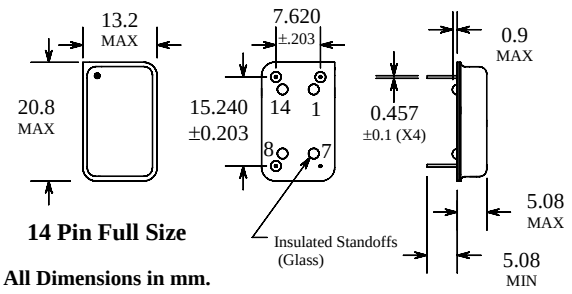
ELECTRICAL SPECIFICATIONS

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_{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		20mSeconds Maximum
Absolute Clock Jitter		±100pSeconds Maximum
One Sigma Clock Jitter		±25pSeconds Maximum

MECHANICAL DIMENSIONS

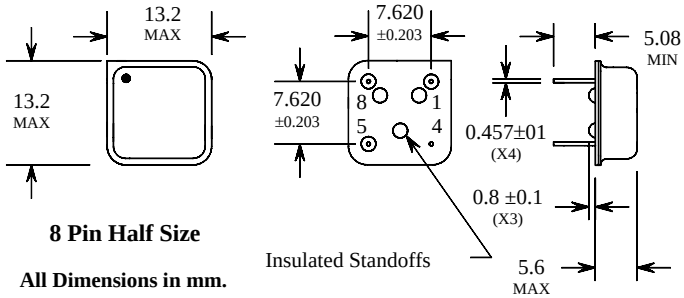
Marking Guide on page F3-F4



14 Pin Full Size

All Dimensions in mm.

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



8 Pin Half Size

All Dimensions in mm.

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