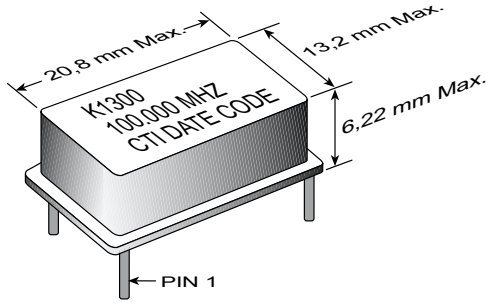
Champion TECHNOLOGIES, INC.

K1300 Series

5V Crystal Clock Oscillators

- TTL/CMOS Compatible
- Tri-State Feature for Auto Test Systems
- Fast Rise and Fall Times
- 70 to 120 MHz Frequency Range
- Tight Symmetry (45/55%) Available
- ±100ppm Stability Standard
  ±50ppm Stability Available - K1350



ELECTRICAL SPECIFICATIONS

MODEL	K1300	K1350
Frequency Range (MHz)	70 to 120	
Frequency Stability (ppm)		
Overall (Typical)	Inclusive of calibration, temperature, voltage, load, shock,vibration, aging	
0°C to 70°C	±100	±50
Temperature Range (°C)		
Operating	0°C to +70°C	
Storage	-55°C to +125°C	
Supply Voltage (V)	+5.0 ±5%	
Output TTL		
Input Current (mA)	50 -80 max	
Symmetry (%)	40/60 @ 1.4V	
T_R and T_F (ns)	5 (0.5V to 2.5V)	
Fanout	10	
Output CMOS		
Input Current (mA)	100 max	
Symmetry (%)	40/60 @ 0.5V_{CC}	
T_R and T_F (ns)	5 (20% -80 % V_{CC})	
Start up Time (ms)		
TTL	<10	
CMOS	<45	

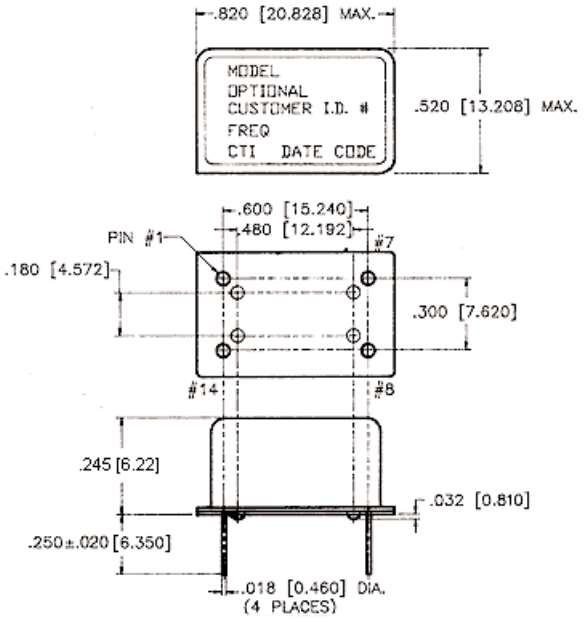
PART NUMBERING GUIDE

K13XXXX - Specify Frequency

- "Blank" = TTL Output
  "C" = CMOS Output
- "Blank" = 40/60% Symmetry
  "S" = 45/55% Symmetry (Available to 100MHz.
- "00" = ±100ppm Stability
  "50" = ±50ppm

2553 N. Edgington Street, Franklin Park, IL 60131 • Phone: 847.451.1000 • Fax: 847.451.7585

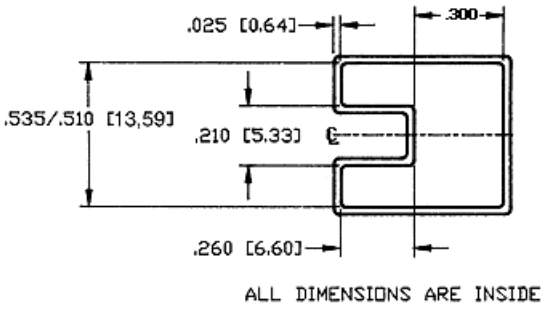
800-888-1499 or www.champtech.com



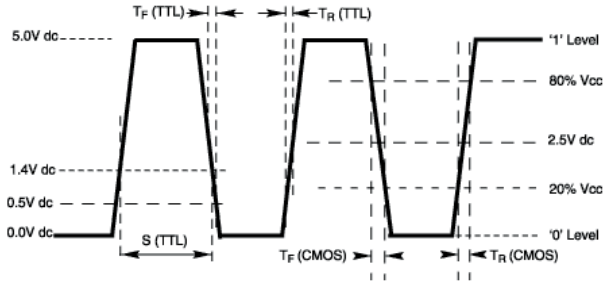
PIN	FUNCTION
1	Tri-State*
2	Ground
3	Output
4	+ V_{CC}

* Input tied internally to +5V. External input if any, should not be less than +3V and not greater than +3.8V for TTL version. For CMOS models, enable with either an open circuit or +5V.

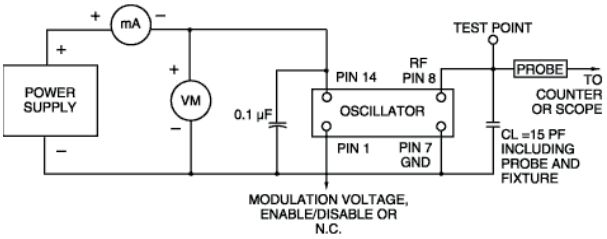
SHIPPING TUBE CROSS SECTION



OUTPUT WAVEFORM



TEST CIRCUIT DIAGRAM



MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

TEST METHODS	REFERENCE PROCEDURES	DESCRIPTION
Temperature Cycle	MIL-STD-833, Mtd 1010, Cond. B	-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell
Mechanical Shock	MIL-STD-883, Mtd 2002, Cond. B	1500 g's
Vibration	MIL-STD 883, Mtd 2007, Cond. B	20-2000 Hz; 0.06 inch; 15g's; 3 planes
Humidity Steady State	MIL-STD-202, Mtd 103	40°C; 90%-95% R.H.; 56 days
Thermal Shock	MIL-STD-883, Mtd 1011.7 Cond. B	100°C to 0°C; Water-to-Water; 15 cycles
Electrostatic Discharge	MIL-STD-883, Mtd 3015 Class II	2 KV to 4 KV Threshold
Solderability	MIL-STD-883, Mtd 2022.2	Solder dip; Meniscograph Criteria
Hermeticity	MIL-STD-883, Mtd 1014.8, Cond. A1	Mass spectro. 2 x 10-8 atmos. CC/sec He
Resistance to Soldering	MIL-STD-202, Mtd 210D, Cond. J	235°C; 30 seconds
Lead Integrity	MIL-STD-883, Mtd 2004.5, Cond. A, B1	Lead tension & bend stress
Marking Permanence	MIL-STD-883, Mtd 2015.8	Resistance to solvents
Life Test	MIL-STD-883, Mtd 1005.6	125°C, powered, 1000 hours minimum