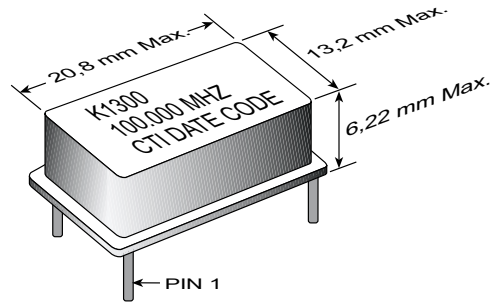


- TTL/CMOS Compatible
- Tri-State Feature for Auto Test Systems
- Fast Rise and Fall Times
- 70 to 120 MHz Frequency Range
- Tight Symmetry (45/55%) Available
- $\pm 100$ ppm Stability Standard
- $\pm 50$ ppm Stability Available - K1350



### ELECTRICAL SPECIFICATIONS

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

### PART NUMBERING GUIDE

**K13XXXX** - Specify Frequency

“Blank” = TTL Output

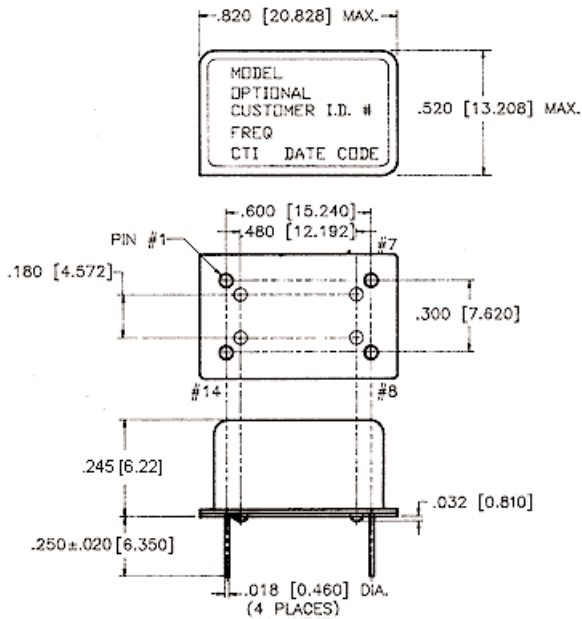
“C” = CMOS Output

“Blank” = 40/60% Symmetry

“S” = 45/55% Symmetry (Available to 100MHz.)

“00” =  $\pm 100$ ppm Stability

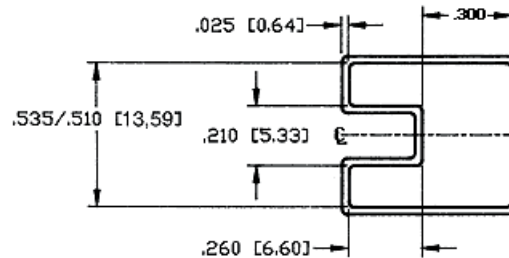
“50” =  $\pm 50$ ppm



PIN	FUNCTION
1	Tri-State*
2	Ground
3	Output
4	+V <sub>CC</sub>

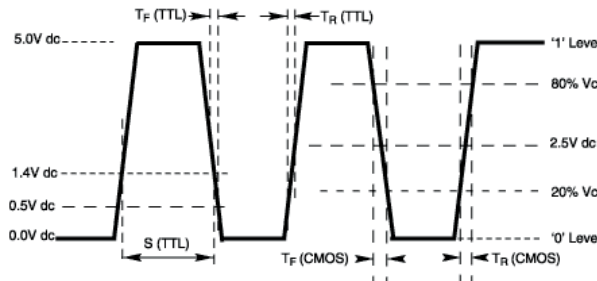
\* Input tied internally to +5V. External input if any, should not be less than +3V and not greater than +3.8V for TTL version. For CMOS models, enable with either an open circuit or +5V.

### SHIPPING TUBE CROSS SECTION

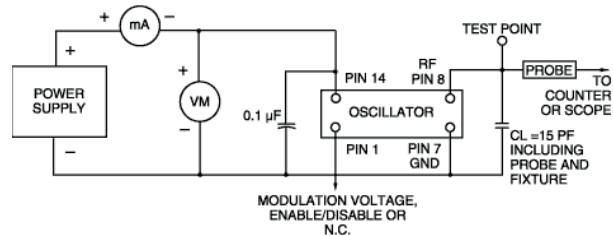


ALL DIMENSIONS ARE INSIDE

### 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 <sup>-8</sup> 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