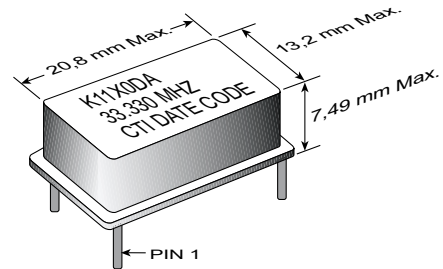


- ♦ **Applications:** Wide Area Networks (WAN's)
Reference Clocking
- ♦ Superior Tolerance Performance Including up to 10 years of aging
- ♦ 2.0 to 35.0 MHz Frequency Range
- ♦ $\pm 10\text{ppm}$ $\pm 20\text{ppm}$ Stability Options
- ♦ -40°C to 85°C Operating Temperature - K1120D
- ♦ 0°C to 70°C Operating Temperature - K1110D
- ♦ Meets Stratum IV Requirements
- ♦ Enable/Disable Option Available

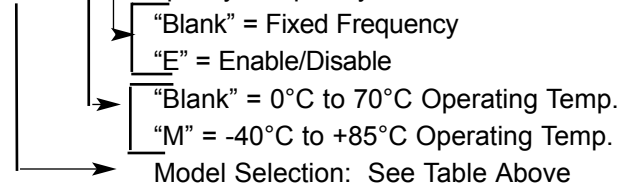


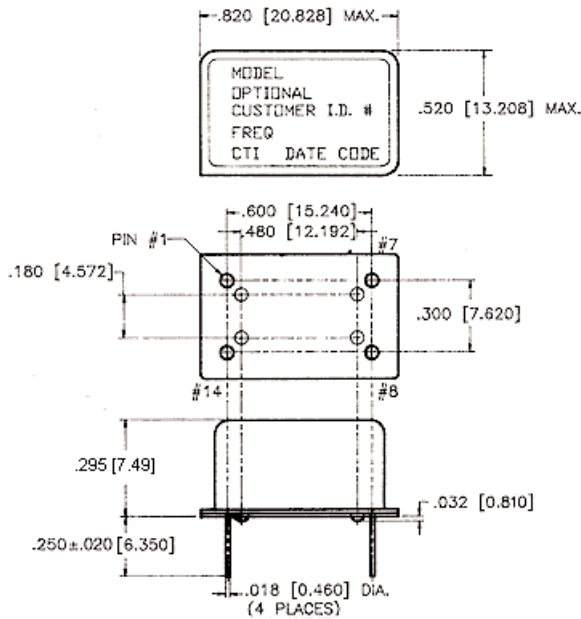
ELECTRICAL SPECIFICATIONS

Model	K1110DA	K1120DAM
Frequency Range (MHz)	2 to 35	
Input Current (mA)	< 30	
Frequency Stability (ppm)		
Overall	Inclusive of Calibration, Temperature, Voltage, Load, Aging	
0°C to 70°C	± 10	-
-40°C to 85°C	-	± 20
Aging @ 50°C (10 Years)	Inclusive	± 3.0
Temperature Range ($^{\circ}\text{C}$)		
Operating	0°C to $+70^{\circ}\text{C}$	-40°C to $+85^{\circ}\text{C}$
Storage	-40°C to $+85^{\circ}\text{C}$	
Supply Voltage (V)	$+5.0\text{V} \pm 5\%$	
Symmetry CMOS/TTL	45/55 < 16MHz; 40/60 \geq 16MHz	
"0" Level (V_{OL})	0.5 max.	
"1" Level (V_{OH})	4.5 min	
Rise Time & Fall Time (ns)	< 5	
Start Up Time (ms)	< 10	

PART NUMBERING GUIDE

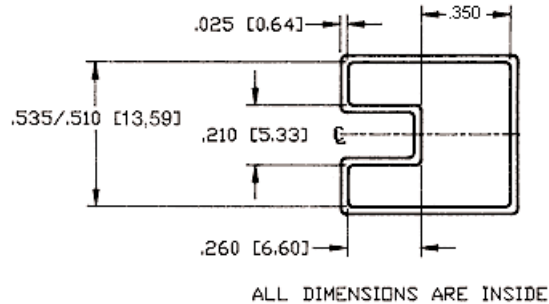
K11X0DAX X - Specify Frequency



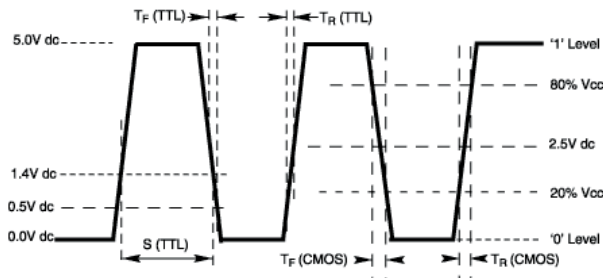


PIN	FUNCTION
1	N/C or Enable/Disable
7	Gnd/ & Case Gnd
8	Output
14	+ V _{CC}

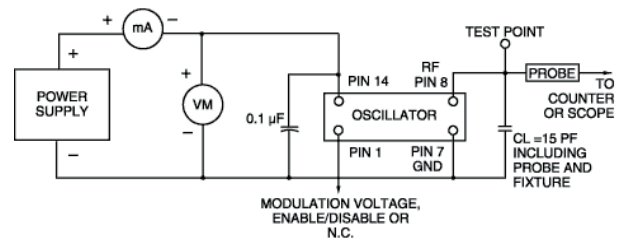
SHIPPING TUBE CROSS SECTION



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-202, Mtd 213, Cond. D	500 g's
Vibration	MIL-STD 202, Mtd 204, Cond. B	10-2000 Hz; 0.06 inch; 15g; 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. A	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 210A, Cond. C	260°C; 10 seconds: 1 inch/sec.
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