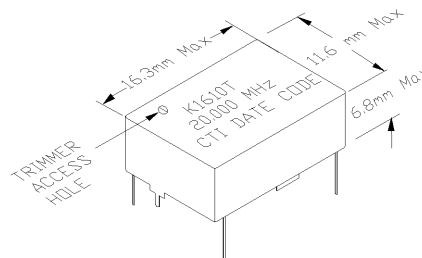


5V Temperature Compensated Crystal Oscillators

- ♦ **Applications:** Clocking "Sync" to NTSC Video Standards; Reference Signal; Signal Tracking
- ♦ ± 10 ppm Stability
- ♦ -40°C to 85°C Op. Temperature
- ♦ TTL/CMOS Output
- ♦ Non Hermetic Package



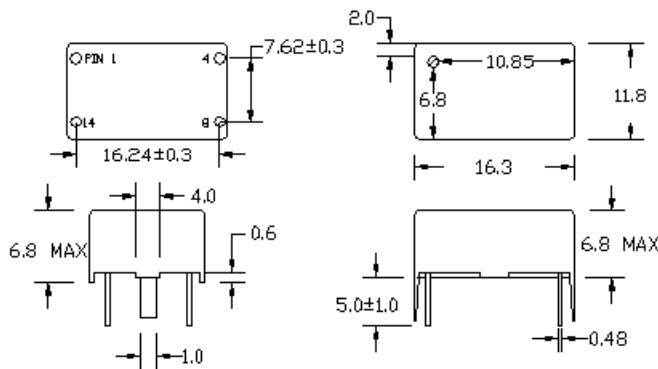
ELECTRICAL SPECIFICATIONS

Model	K1610T
Frequency Range (MHz)	20
Input Current (mA)	< 20
Frequency Control Function	(For Custom Deviation Range, Vc Range, etc. - Consult Factory)
Manual Adjusted (ppm)	± 5 min.
Frequency Stability (ppm)	
Overall	± 10 ppm (Inclusive of Calibration, Temperature, Voltage, Load and Aging)
25°C Calibration	± 1 ppm
Over Operating Temperature	± 3 ppm
Aging 1st Year	± 1 ppm
Temperature Range (°C)	
Operating	-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 TTL/CMOS	40/60
"0" Level (V_{OL})	0.5 max.
"1" Level (V_{OH})	3.5 min.
Rise & Fall Times (ns)	10 max.
Start Up Time (ms)	<10

PART NUMBERING GUIDE

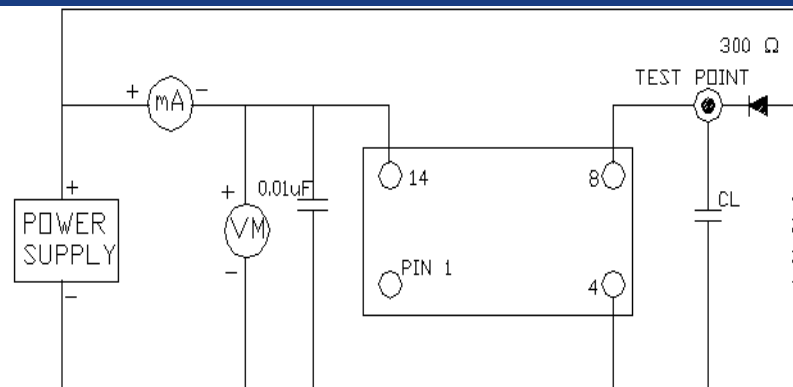
K1610T - 20.000MHz

5V Temperature Compensated Crystal Oscillators



PIN	FUNCTION
1	Removed
7	Gnd/ & Case Gnd
8	Output
14	+ V _{CC}

TEST CIRCUIT DIAGRAM



CL; Total Fixture Probe Capacitance: 15pF or 50pF Max
Diode: FD700 or Equivalent

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 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