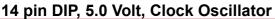
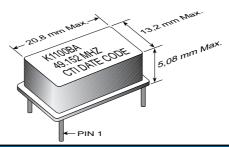
### K1100BA, K1150BA, K1125BA, K1110BA Series





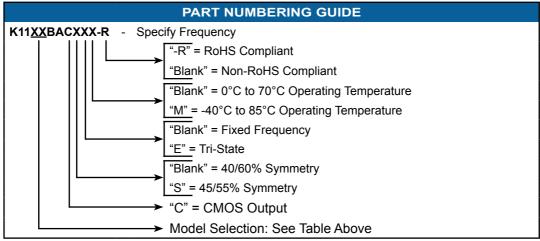
# THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS. PLEASE REFER TO THE MHO+ PRODUCT SERIES.

- · 4-pin Package, Compatible with 14-pin DIL
- 1.0MHz to 70MHz Frequency Range
- HCMOS Circuit, TTL/CMOS Compatible Tight Symmetry (45/55%) Available
- Tri-State Option Available
- ±100ppm Stability Standard
   Tighter Stabilities Available
   ±10ppm Stability:- K1110BA
  - ±25ppm Stability:- K1125BA ±50ppm Stability:- K1150BA





| MODEL                                  | K1100BA        | K1150BA   | K1125BA | K1110BA                         |
|--|----------------|---|---------|---------------------------------|
| Frequency Range (MHz)                  | 1.0 to 70      |   |         |                                 |
| Frequency Stability (ppm)              |                |   |         |                                 |
| Overall                                | Inclusive of c | Inclusive of calibration, temperature, voltage, load, shock, vibration, aging |         | Rating Over<br>Temperature Only |
| 0°C to 70°C                            | ±100           | ±50   | ±25     | ±10                             |
| -40°C to 85°C                          | ±150           | ±100  | NA      | N/A                             |
| Temperature Range (°C)                 |                | 20 13   |         |                                 |
| Operating                              |                | -40°C to +85°C  |         |                                 |
| Storage                                |                | -55°C to +125°C   |         |                                 |
| Supply Voltage (V)                     |                | +5.0 ±10%   |         |                                 |
| Supply Current (mA)                    |                |   |         |                                 |
| <20MHz                                 |                | 15  |         |                                 |
| 20 - 70 MHz                            |                | 50  |         |                                 |
| Output TTL                             |                |   |         |                                 |
| Symmetry                               |                | 40/60% @ 1.4V; 45/55% Optional  |         |                                 |
| T <sub>R</sub> and T <sub>F</sub> (ns) |                | ≤20MHz =8; > 20MHz = 6  |         |                                 |
| Fanout (TTL)                           |                | 10  |         |                                 |
| Output CMOS                            |                |   |         |                                 |
| Symmetry                               |                | 40/60 @ 0.5V <sub>CC</sub>  |         |                                 |
| T <sub>R</sub> and T <sub>F</sub> (ns) |                | ≤20MHz =10; > 20MHz = 8   |         |                                 |
| Start up Time (ms)                     |                | <10   |         |                                 |



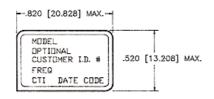
MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

### K1100BA, K1150BA, K1125BA, K1110BA Series

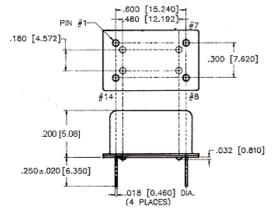




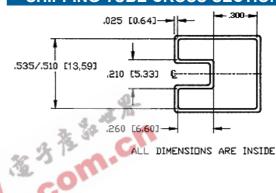
# THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS. PLEASE REFER TO THE MHO+ PRODUCT SERIES.



| PIN | FUNCTION        |
|-----|-----------------|
| 1   | N/C / Tri-State |
| 2   | Ground          |
| 3   | Output          |
| 4   | + VCC           |

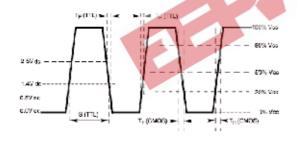


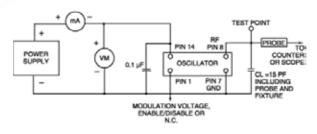
### **SHIPPING TUBE CROSS SECTION**



#### **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                     |  |  |

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