

# TTL/HCMOS CRYSTAL OSCILLATORS

## MCO-1500A / MCO-1500B (HALF SIZE)

### ■ SPECIFICATIONS

| Model   | MCO-1500A  |                               | MCO-1500B   |                                  |
|---|--|-------------------------------|---|----------------------------------|
| Package   | 8Pin Dip(Half Size)  |                               | 8Pin Dip(Half Size)   |                                  |
| Frequency Range (Fo)  | 1.000MHz to 100.000MHz   |                               | 1.000MHz to 70.000MHz   |                                  |
| Frequency Stability (f/fo)                                    | A=±25ppm,B=±50ppm,C=±100ppm  |                               |   |                                  |
| Operating Temperature Range (TOPR)                            | 0°C to 70°C,-40°C to 85°C(Available)   |                               |   |                                  |
| Storage Temp. Range (TOPR)                                    | -55°C to 125°C   |                               |   |                                  |
| Power Supply Voltage (Vdd)                                    | 5Vdc±0.5Vdc  |                               | 3.3Vdc±0.3Vdc   |                                  |
| Aging (at25°C)  | ±5ppm/year Max.  |                               |   |                                  |
| Supply Current (Idd)  | 1.000MHz to 23.999MHz 20mA Max.<br>24.000MHz to 50.000MHz 30mA Max.<br>50.000MHz to 70.000MHz 40mA Max.<br>70.000MHz to 100.000MHz 60mA Max. |                               | 1.000MHz to 23.999MHz 10mA Max.<br><br>24.000MHz to 50.000MHz 20mA Max. |                                  |
| Output Symmetry (At50% Vdd)                                   | 40 to 60%Normal,45 to 55%Tight   |                               |   |                                  |
| Rise and Fall Time(Tr,Tf) 10% to 90% of Waveform W/Hcmos Load | ±5ns Max.  |                               |   |                                  |
| Output Voltage Logic High (Voh)                               | 4.5V min   |                               | 2.7Vdc minimum  |                                  |
| Output Voltage Logic Low (Vol)                                | 0.5Vdc max   |                               | 0.4Vdc max  |                                  |
| Output Load   | 1.000MHz to 40.000MHz  | 10TTL Load or 50pF HCMOS Load | 1.000MHz to 24.000MHz   | 2TTL Load or 15pF HCMOS Load Max |
|   | 40.000MHz to 100.000MHz  | 10TTL Load or 15pF HCMOS Load | 24.000MHz to 70.000MHz  | 15pF HCMOS Load Max              |
| pin 1   |  |                               | No Connection   | No Connection to Enables Output  |
| Tri-State Tri   |  |                               | Vih   | 2.2V dc Minimum to Enable Output |
| Input Voltage   |  |                               | Vih   | 0.8Vdc Max.to disable Out@ut     |

### ■ DIMENSIONS

