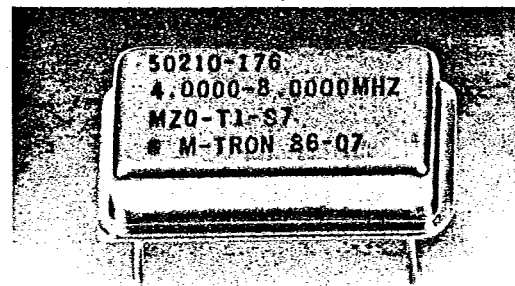


Competitive Excellence

MZO Series
NMOS Oscillators

MZO SERIES NMOS CLOCK OSCILLATORS WITH OPTIONAL TTL AUXILIARY OUTPUTS

M-tron MZO oscillators are designed to drive Zilog Z80A, Z-80B, Z8000-type or equivalent 8-bit and 16-bit microprocessors - such as the Mostek MK3880-4 and -6, Sharp LH0080A, AMD AMZ8000, and NECμPD780C-1. An optional TTL-compatible output at twice the processor frequency is also provided to satisfy other timing requirements of a system based in these processors.



ELECTRICAL CHARACTERISTICS

(Operating Conditions 0° to +70° C, Supply Voltage +5 VDC ± 10%)

NMOS Only Version
Parameters

	Min.	Pin 8 Max.	Units
Available Frequencies	1.75	12.0	MHz
T _r and T _f , rise and fall time	—	20	ns
V _{OL} , Low logic level	—	0.45	V
V _{OH} , High logic level	V _{cc} -0.4	—	V
Symmetry	40/60	60/40	%
Supply Current	—	100	ma

NMOS/TTL Version
Parameters

	Min.	Pin 1 Max.	Min.	Pin 8 Max.	Units
Available Frequencies	3.5	12.0	1.75	6.0	MHz
T _r and T _f , rise and fall time	—	10	—	20	ns
V _{OL} , Low logic level	—	0.5	—	0.45	V
V _{OH} , High logic level	2.5	—	V _{cc} -0.4	—	V
Symmetry	40/60	60/40	45/55	55/45	%
Supply Current	—	110	—	110	ma

Available Stabilities Over Temperature

°C	%	S ₀ ±1	S ₁ ±.1	S ₂ ±.05	S ₃ ±.01	S ₄ ±.005	S ₅ ±.0035	S ₆ ±.0025	S ₇ ±0/-0.2
T1 0 to +70									
T2 -40 to +85									
T3 -55 to +105									
T4 -55 to +125									

□ Standard

▣ Available

■ Not Available

Part Numbering System

MZO - T1 - S7 - 8.000000 MHz
(Series) (Temp. Range) (Stability) (Frequency)

Be sure to specify auxiliary TTL output if desired.

Quality Control Specifications

AQL: 0.4 unless requested otherwise

Solderability: MIL-STD-202, Method 208

Thermal Shock: MIL-STD-202, Method 107, Cond. B

Shock: MIL-STD-202, Method 213, Condition C

Vibration: MIL-STD-202, Methods 201 and 204

Solvent Resistance: MIL-STD-202, Method 215, Sol. C

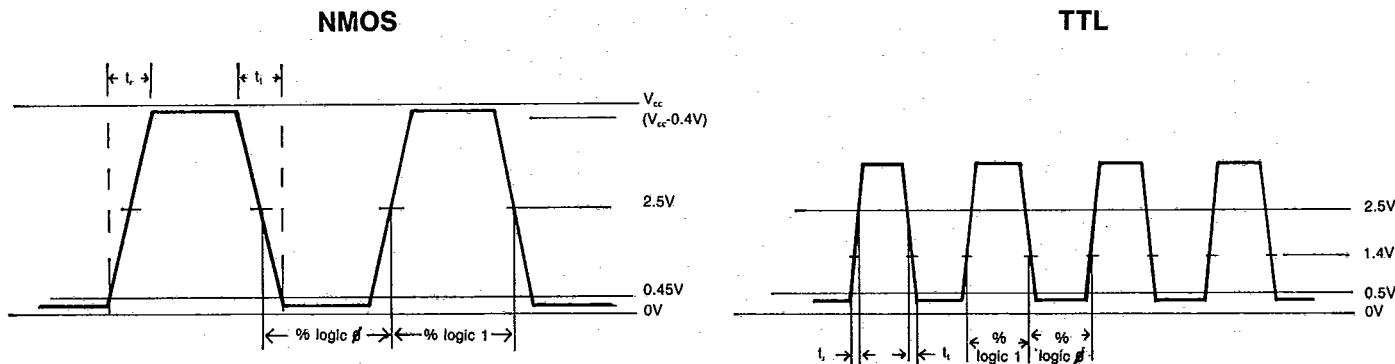
Hermetic Seal: leak rate < 10⁻⁶ atmos.cc/sec. of Helium

Marking: Ink stamped.

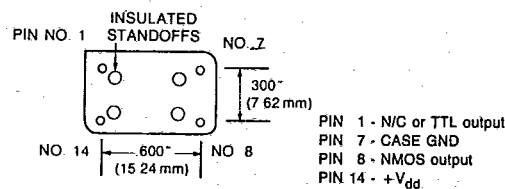
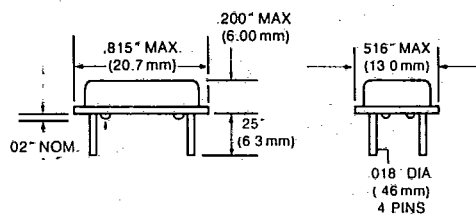
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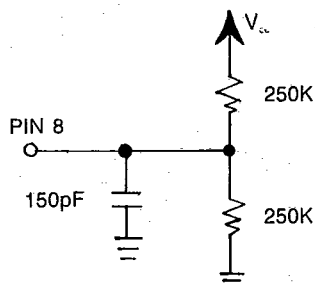
Waveforms



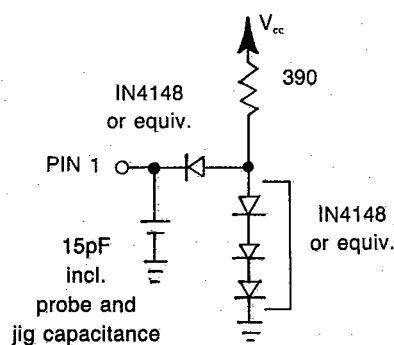
Dimensions:



MOS Equivalent Load



TTL Equivalent Load



M-tron

Competitive Excellence in Quality Hybrid
Products, Clock Oscillators and Quartz Crystals.

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