



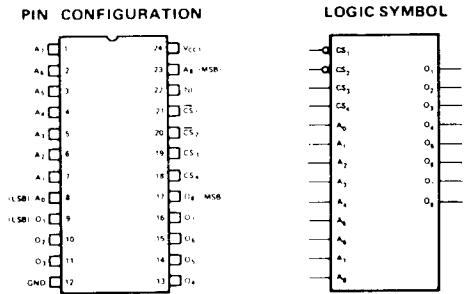
M3604A, M3624A

4K (512 × 8) HIGH-SPEED PROM

MILITARY TEMP

- **Military Temperature Range:**
-55°C to +125°C
- **Fast Access Time — 90nsec Maximum**
- **Open Collector (M3604A) or Three-State (M3624A) Outputs**
- **Four Chip Select Inputs for Easy Memory Expansion**
- **Polycrystalline Silicon Fuse for Higher Reliability**
- **Standard Packaging — 24 Pin Hermetic Dual In-Line Lead Configuration**

The M3604A and M3624A are military temperature range PROMs organized as 512 words by 8 bits. They are manufactured with all outputs high and logic output low levels can be electrically programmed in selected bit locations. The M3604A and M3624A, except for programming, have the same electrical specifications and are direct replacements to their predecessors, the M3604 and M3624.



MILITARY TEMP.

A.C. CHARACTERISTICS $V_{CC} = +5.0V \pm 10\%$, $T_A = -55^\circ C$ to $+125^\circ C$

SYMBOL	PARAMETER	LIMITS		UNIT	CONDITIONS
		TYP. ^[1]	MAX.		
t_{A++} , t_{A--} t_{A+-} , t_{A-+}	Address to Output Delay	60	90	ns	$\overline{CS}_1 = \overline{CS}_2 = V_{IL}$ and $CS_3 = CS_4 = V_{IH}$ to Select the PROM
t_{S++}	Chip Select to Output Delay	20	45	ns	
t_{S--}	Chip Select to Output Delay	20	45	ns	

CAPACITANCE ^[2] $T_A = 25^\circ C$, $f = 1$ MHz

SYMBOL	PARAMETER	LIMITS		UNIT	TEST CONDITIONS
		TYP.	MAX.		
C_{INA}	Address Input Capacitance	4	10	pF	$V_{CC} = 5V$ $V_{IN} = 2.5V$
C_{INS}	Chip-Select Input Capacitance	6	10	pF	$V_{CC} = 5V$ $V_{IN} = 2.5V$
C_{OUT}	Output Capacitance	7	15	pF	$V_{CC} = 5V$ $V_{OUT} = 2.5V$

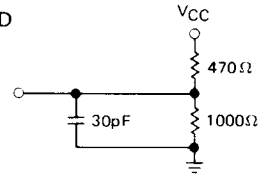
- NOTES:** 1. Typical values are at $25^\circ C$ and nominal voltage.
2. This parameter is only periodically sampled and is not 100% tested.

SWITCHING CHARACTERISTICS

Conditions of Test:

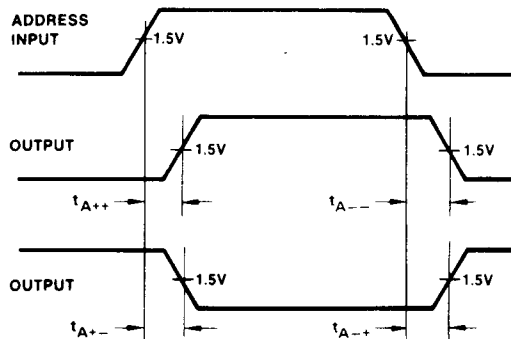
Input pulse amplitudes - 2.5V
Input pulse rise and fall times of
5 nanoseconds between 1 volt and 2 volts
Speed measurements are made at 1.5 volt levels
Output loading is 10 mA and 30 pF
Frequency of test - 2.5 MHz

10 mA TEST LOAD



WAVEFORMS

ADDRESS TO OUTPUT DELAY



CHIP SELECT TO OUTPUT DELAY

