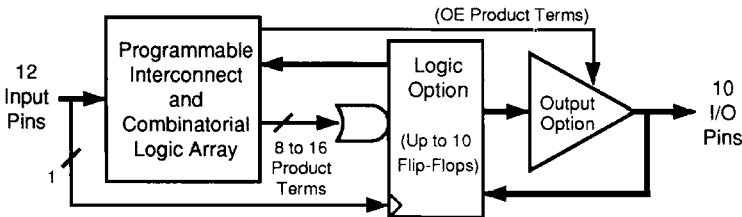


Features

- High Speed Programmable Logic Device
15 ns Max Propagation Delay
5 V ±10% Operation
- Low Power CMOS Operation
- CMOS and TTL Compatible Inputs and Outputs
10 µA Leakage Maximum
- Reprogrammable - Tested 100% for Programmability
- High Reliability CMOS Technology
2000 V ESD Protection
200 mA Latchup Immunity
- Full Military, Commercial and Industrial Temperature Ranges
- Dual-In-Line and Surface Mount Packages

Speed	"L"	-15,-20	All
Temp	C/M	C/M	Others
I _{cc} (mA)	12/15	90/100	55

Logic Diagram



Description

The AT22V10 and AT22V10L are CMOS high performance Erasable Programmable Logic Devices (EPLDs). Speeds down to 15 ns and power dissipation as low as 12 mA are offered. All speed ranges are specified over the full 5 V ±10% range. All pins offer a low ±10 µA leakage.

The AT22V10L provides the optimum low power CMOS EPLD solution, with low DC power (8 mA typical) and full CMOS output levels. The AT22V10L significantly reduces total system power and enhances system reliability.

Full CMOS output levels help reduce power in many other system components.

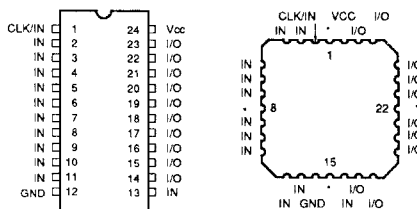
The AT22V10 and AT22V10L incorporate a variable product term architecture. Each output is allocated from eight to 16 product terms, which allows highly complex logic functions to be realized.

Two additional product terms are included to provide synchronous preset and asynchronous reset. These terms are common to all 10 registers. All registers are automatically cleared upon power up.

Register Preload simplifies testing. A Security Fuse prevents unauthorized copying of programmed fuse patterns.

Pin Configurations

Pin Name	Function
CLK/IN	Clock and Logic Input
IN	Logic Inputs
I/O	Bidirectional Buffers
*	No Internal Connection
VCC	+5 V Supply



**High Speed
UV Erasable
Programmable
Logic Device**



Absolute Maximum Ratings*

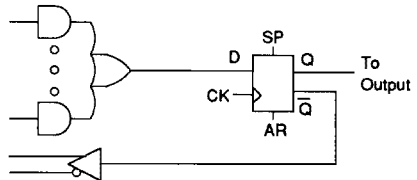
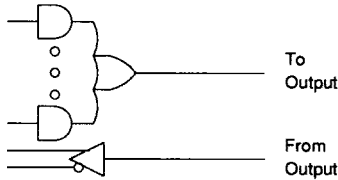
Temperature Under Bias.....	-55°C to +125°C
Storage Temperature.....	-65°C to +150°C
Voltage on Any Pin with Respect to Ground.....	-2.0 V to +7.0 V ⁽¹⁾
Voltage on Input Pins with Respect to Ground During Programming.....	-2.0 V to +14.0 V ⁽¹⁾
Programming Voltage with Respect to Ground.....	-2.0 V to +14.0 V ⁽¹⁾
Integrated UV Erase Dose.....	7258 W-sec/cm ²

*NOTICE: Stresses beyond those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions beyond those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

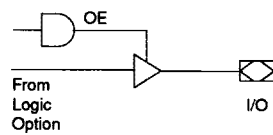
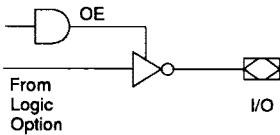
Note:

1. Minimum voltage is -0.6 V dc which may undershoot to -2.0 V for pulses of less than 20 ns. Maximum output pin voltage is $V_{CC}+0.75$ V dc which may overshoot to +7.0 V for pulses of less than 20 ns.

Logic Options



Output Options



D.C. and A.C. Operating Conditions

	Commercial AT22V10/L -15, -20, -25, -35	Industrial AT22V10/L -15, -20, -25, -35	Military AT22V10/L -15, -20, -25, -30
Operating Temperature (Case)	0°C - 70°C	-40°C - 85°C	-55°C - 125°C
V _{CC} Power Supply	5 V ± 10%	5 V ± 10%	5 V ± 10%

Operating Modes

Mode	24-Pin DIP	1	5	8	13	I/Os	V _{CC} (24)
	28-Pin JLCC	2	6	10	16	I/Os	V _{CC} (28)
"EPLD"	X ⁽¹⁾	X	X	X	X	I/O	5 V
Program	V _{PP}	X / V _H ⁽²⁾	X	X	V _{PP}	D _{IN}	6 V
PGM Verify	V _{PP}	X/V _H	X	X	V _{IL}	D _{OUT}	6 V
PGM Inhibit	V _{PP}	X/V _H	X	X	V _{IH}	High Z	6 V
Preload	X	X	X	V _H	X	D _{IN}	5 V

Notes: 1. X can be V_{IL} or V_{IH}.

2. V_H = 11.0 V to 14.0 V

D.C. Characteristics

Symbol	Parameter	Condition	Min	Typ	Max	Units	
I _{LI}	Input Load Current	V _{IN} = -0.1 V to V _{CC} +1 V			10	μA	
I _{LO}	Output Leakage Current	V _{OUT} = -0.1 V to V _{CC} +0.1 V			10	μA	
I _{CC}	Power Supply Current	V _{CC} = MAX, V _{IN} = GND, Outputs Open	AT22V10-15,-20	Com.		90	mA
				Ind., Mil.		100	mA
			AT22V10-25,-35 ⁽²⁾			55	mA
I _{CC2}	Clocked Power Supply Current	f = 1 MHz, V _{CC} = MAX, Outputs Open	AT22V10L ⁽²⁾	Com.	1.7	12	mA
				Ind., Mil.	2.0	15	mA
I _{CC2}	Clocked Power Supply Current	f = 1 MHz, V _{CC} = MAX, Outputs Open	AT22V10L ⁽²⁾	Com.		15	mA
				Ind., Mil.		20	mA
I _{OS} ⁽¹⁾	Output Short Circuit Current	V _{OUT} = 0.5 V				-90	mA
V _{IL}	Input Low Voltage		-0.6		0.8	V	
V _{IH}	Input High Voltage		2.0		V _{CC} +0.75	V	
V _{OL}	Output Low Voltage	V _{IN} = V _{IH} or V _{IL} , V _{CC} = MIN	I _{OL} = 16 mA	Com., Ind.		0.5	V
			I _{OL} = 12 mA	Mil.		0.5	V
			I _{OL} = 24 mA	Com.		0.8	V
V _{OH}	Output High Voltage	V _{IN} =V _{IH} or V _{IL} , V _{CC} =MIN	I _{OH} = -100 μA		V _{CC} -0.3		V
			I _{OH} = -4.0 mA		2.4		V

Notes: 1. Not more than one output at a time should be shorted.
Duration of short circuit test should not exceed 30 sec.

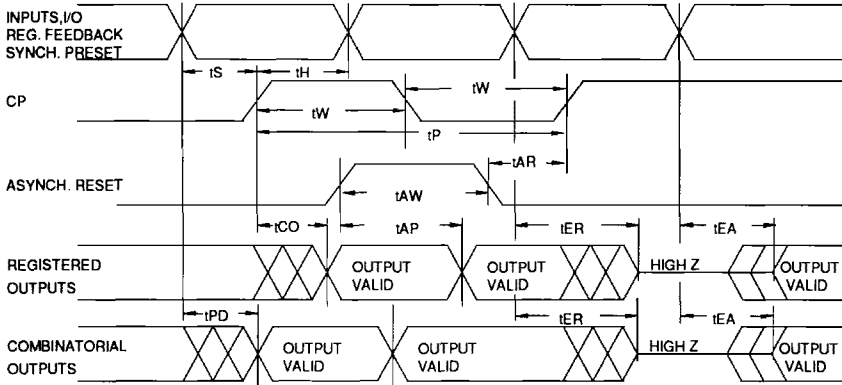
2. See I_{CC} vs. Frequency curves in the back of this data sheet.

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A.C. Characteristics, Commercial and Industrial

Symbol	Parameter	AT22V10-15			AT22V10/L-20			AT22V10/L-25			AT22V10/L-35			Units
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
t _{PD}	Input or Feedback to Non-Registered Output		10	15		12	20		15	25		20	35	ns
t _{EA}	Input to Output Enable		10	15			20		15	25		20	35	ns
t _{ER}	Input to Output Disable		10	15			20		15	25		20	35	ns
t _{CF}	Clock to Feedback	0	1	2.5	0	4	8	0	5	10	0	10	15	ns
t _{CO}	Clock to Output	0	7	10	0	8	12	0	10	15	0	12	20	ns
t _S	Input or Feedback Setup Time	10	8		12	8		15	12		20	15		ns
t _H	Hold Time	0			0			0			0			ns
t _P	Clock Period	12			20			24			30			ns
t _W	Clock Width	6			10			12			15			ns
F _{MAX}	External Feedback 1/(t _S +t _{CO})			50.0			41.6			33.3			25.0	MHz
	Internal Feedback 1/(t _S +t _{CF})			80.0			50.0			40.0			28.5	MHz
	No Feedback 1/(t _P)			83.3			50.0			41.6			33.3	MHz
t _{AW}	Asynchronous Reset Width	15	8		20	9		25	10		30	15		ns
t _{AR}	Asynchronous Reset, Synchronous Preset, Recovery Time	15	8		20	12		25	15		30	18		ns
t _{AP}	Asynchronous Reset to Registered Output Reset		12	20		15	22		18	25		20	30	ns

A.C. Waveforms ⁽¹⁾

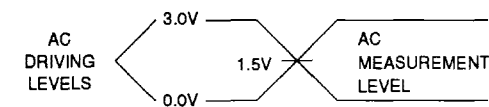


Note: 1. Timing measurement reference is 1.5 V. Input AC driving levels are 0.0 V and 3.0 V, unless otherwise specified.

A.C. Characteristics, Military

Symbol	Parameter	AT22V10-15			AT22V10/L-20			AT22V10/L-25			AT22V10/L-30			Units
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
t_{PD}	Input or Feedback to Non-Registered Output		10	15		12	20		15	25		20	30	ns
t_{EA}	Input to Output Enable		10	15			20		15	25		20	30	ns
t_{ER}	Input to Output Disable		10	15			20		15	25		20	30	ns
t_{CF}	Clock to Feedback	0	1	2.5	0	4	8	0	5	10	0	10	15	ns
t_{CO}	Clock to Output	0	7	10	0	8	15	0	10	15	0	12	20	ns
t_{SF}	Feedback Setup Time	10	8		12	10		15	12		18	15		ns
t_S	Input Setup Time	10	8		17	14		18	15		20	15		ns
t_H	Hold Time	0			0			0			0			ns
t_P	Clock Period	12			20			24			30			ns
t_W	Clock Width	6			10			12			15			ns
F_{MAX}	External Feedback $1/(t_S+t_{CO})$			50.0			31.2			30.3			25.0	MHz
	Internal Feedback $1/(t_S+t_{CF})$			80.0			50.0			40.0			30.0	MHz
	No Feedback $1/t_P$			83.3			50.0			41.6			33.3	MHz
t_{AW}	Asynchronous Reset Width	15	8		20	9		25	10		30	15		ns
t_{AR}	Asynchronous Reset Recovery Time	15	8		20	12		25	15		30	18		ns
t_{AP}	Asynchronous Reset to Registered Output Reset		12	20		15	22		18	25		20	30	ns

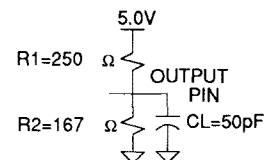
Input Test Waveforms and Measurement Levels



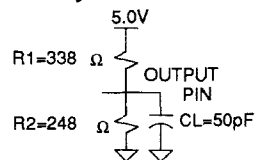
$t_R, t_F < 5$ ns (10% to 90%)

Output Test Loads:

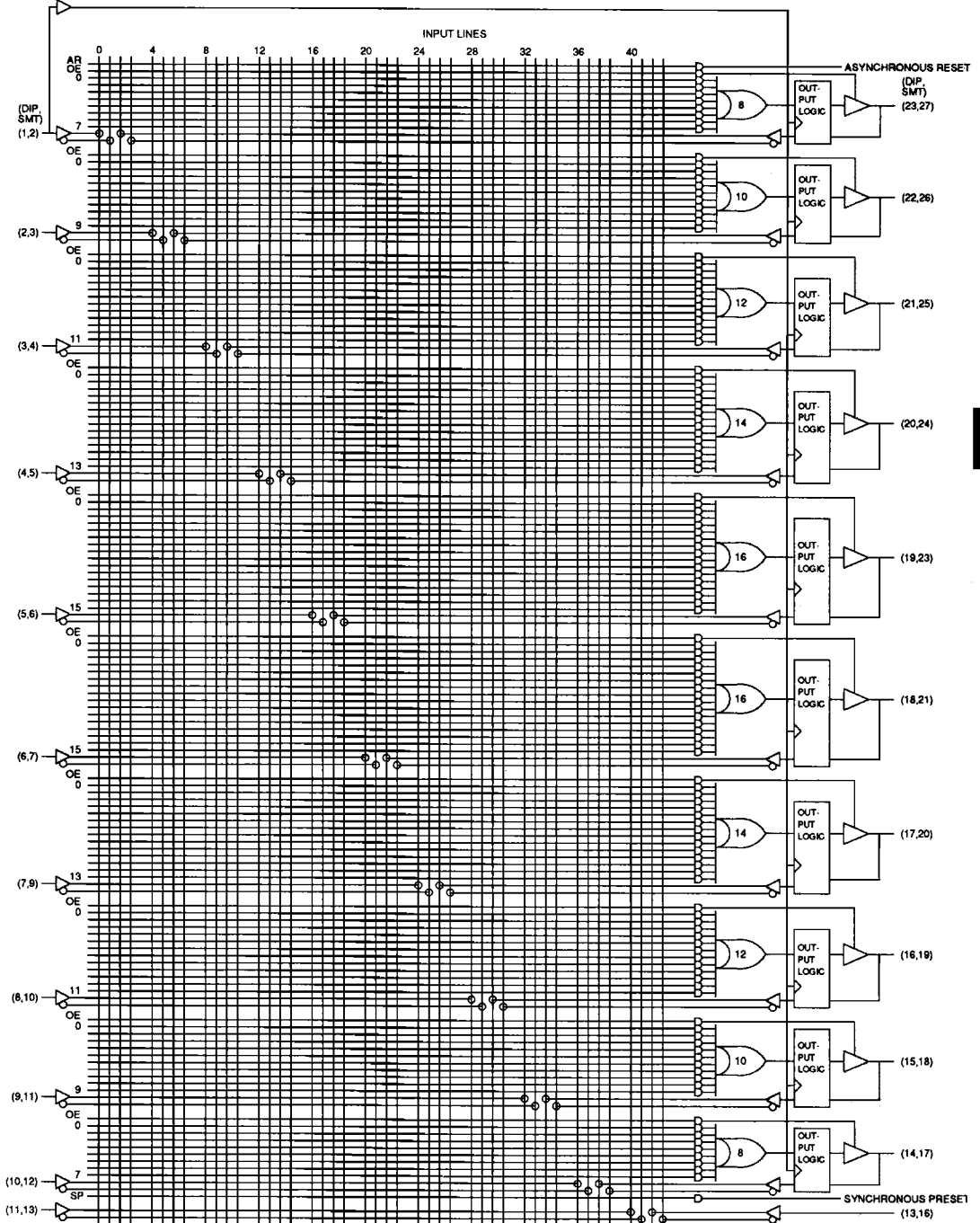
Commercial



Military



Functional Logic Diagram AT22V10/L

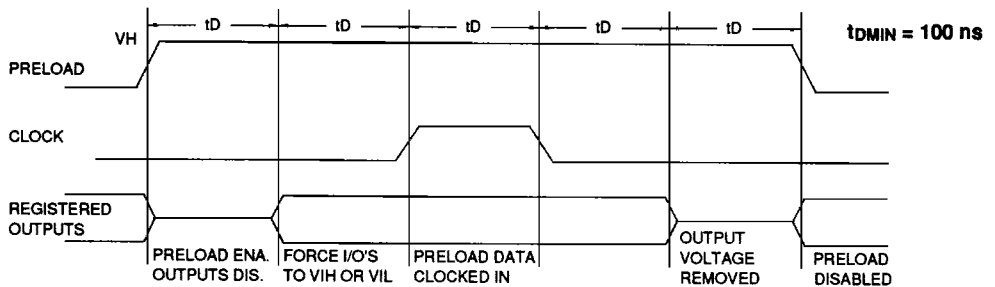


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Preload of Registered Outputs

The registers in the AT22V10 and AT22V10L are provided with circuitry to allow loading of each register asynchronously with either a high or a low. This feature will simplify testing since any state can be forced into the registers to control test sequencing. A V_{IH} level on the I/O pin will force the register high; a V_{IL} will force it low, independent of the polarity bit (C0) setting. The PRELOAD state is entered by placing an 11 V to 14 V signal on pin 8 on DIPs, and pin 10 on SMPs. When the clock pin is pulsed high, the data on the I/O pins is placed into the ten registers.

Level forced on registered output pin during PRELOAD cycle.	Register state After Cycle
V_{IH}	High
V_{IL}	Low

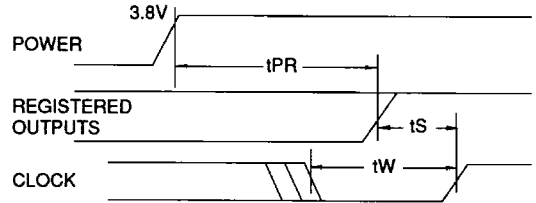


Power Up Reset

The registers in the AT22V10 and AT22V10L are designed to reset during power up. At a point delayed slightly from V_{CC} crossing 3.8 V, all registers will be reset to the low state. The output state will depend on the polarity of the output buffer.

This feature is critical for state machine initialization. However, due to the asynchronous nature of reset and the uncertainty of how V_{CC} actually rises in the system, the following conditions are required:

- 1) The V_{CC} rise must be monotonic,
- 2) After reset occurs, all input and feedback setup times must be met before driving the clock pin high, and
- 3) The clock must remain stable during t_{PR} .



Parameter	Description	Min	Typ	Max	Units
t_{PR}	Power-Up Reset Time		600	1000	ns

Pin Capacitance $(f = 1 \text{ MHz}, T = 25^\circ\text{C})^{(1)}$

	Typ	Max	Units	Conditions
C_{IN}	5	8	pF	$V_{IN} = 0 \text{ V}$
C_{OUT}	6	8	pF	$V_{OUT} = 0 \text{ V}$

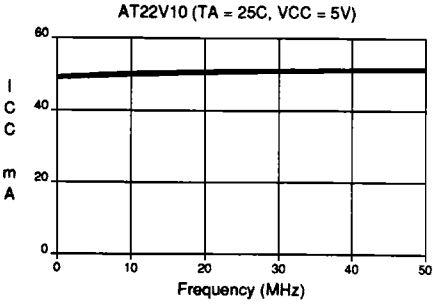
Note: 1. Typical values for nominal supply voltage. This parameter is only sampled and is not 100% tested.

Erasure Characteristics

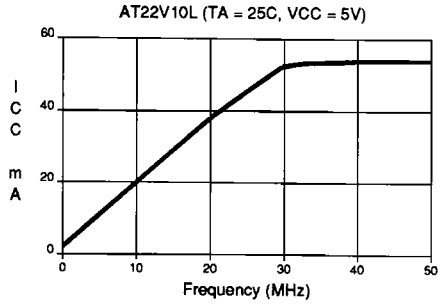
The entire fuse array of an AT22V10 or AT22V10L is erased after exposure to ultraviolet light at a wavelength of 2537 Å. Complete erasure is assured after a minimum of 20 minutes exposure using $12,000 \mu\text{W}/\text{cm}^2$ intensity lamps spaced one inch away from the chip. Minimum erase time for lamps at other in-

tensity ratings can be calculated from the minimum integrated erasure dose of $15 \text{ W}\cdot\text{sec}/\text{cm}^2$. To prevent unintentional erasure, an opaque label is recommended to cover the clear window on any UV erasable EPLD which will be subjected to continuous fluorescent indoor lighting or sunlight.

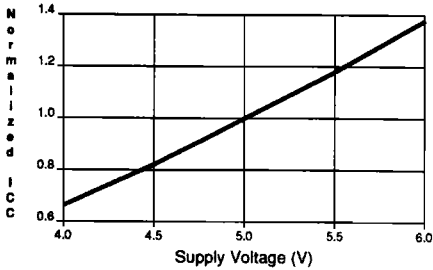
SUPPLY CURRENT vs. INPUT FREQUENCY



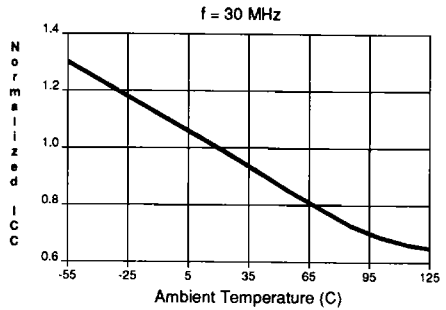
SUPPLY CURRENT vs. INPUT FREQUENCY



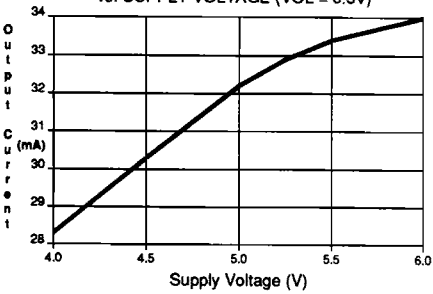
NORMALIZED SUPPLY CURRENT vs. SUPPLY VOLTAGE



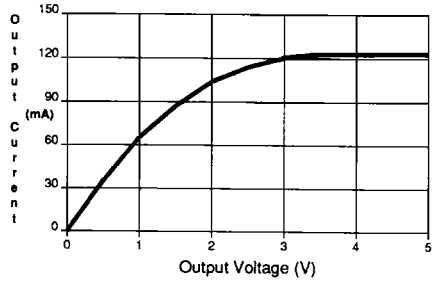
NORMALIZED ICC vs. AMBIENT TEMP.



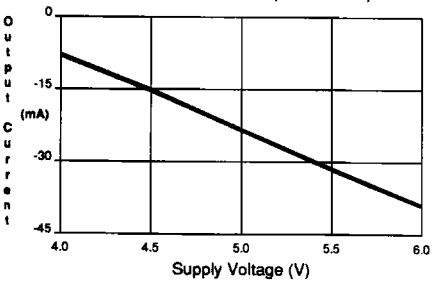
OUTPUT SINK CURRENT vs. SUPPLY VOLTAGE (VOL = 0.5V)



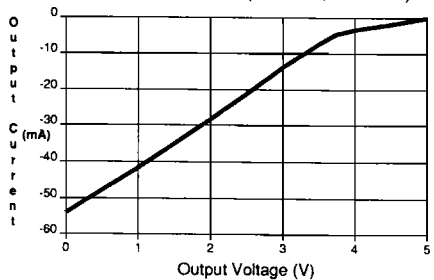
OUTPUT SINK CURRENT vs. OUTPUT VOLTAGE (TA = 25C, VCC = 5V)



OUTPUT SOURCE CURRENT vs. SUPPLY VOLTAGE (VOH = 2.4V)

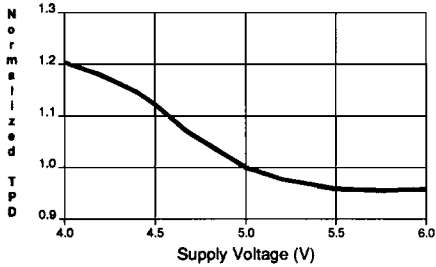


OUTPUT SOURCE CURRENT vs. OUTPUT VOLTAGE (TA = 25C, VCC = 5V)

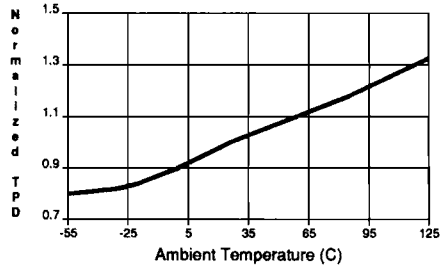


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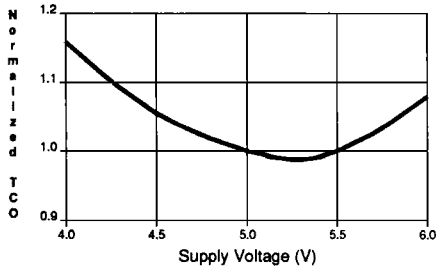
**NORMALIZED TPD
vs. SUPPLY VOLTAGE**



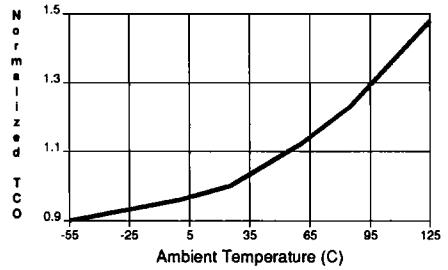
**NORMALIZED TPD
vs. TEMPERATURE**



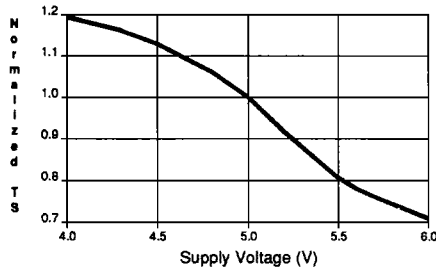
**NORMALIZED TCO
vs. SUPPLY VOLTAGE**



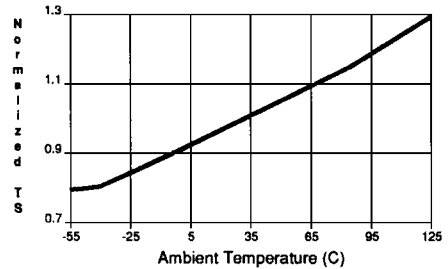
**NORMALIZED TCO
vs. TEMPERATURE**



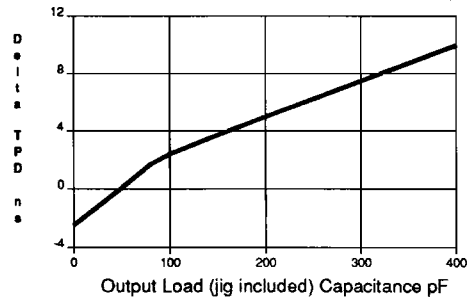
**NORMALIZED TS
vs. SUPPLY VOLTAGE**



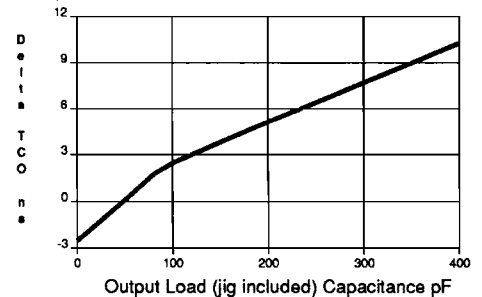
**NORMALIZED TS
vs. TEMPERATURE**



**DELTA TPD vs. OUTPUT LOADING
(VCC = 4.5V, OUTPUT LOAD = COMMERCIAL)**



**DELTA TCO vs. OUTPUT LOADING
(VCC = 4.5V, OUTPUT LOAD = COMMERCIAL)**



Ordering Information

tpd (ns)	ts (ns)	tco (ns)	Ordering Code	Package	Operation Range	
15	10	10	AT22V10-15DC	24DW3	Commercial (0°C to 70°C)	
			AT22V10-15FC	24C		
			AT22V10-15GC	24D3		
			AT22V10-15JC	28J		
			AT22V10-15KC	28KW		
			AT22V10-15LC	28LW		
			AT22V10-15NC	28L		
			AT22V10-15PC	24P3		
			AT22V10-15SC	24S		
			AT22V10-15YC	24CW		
			AT22V10-15DI	24DW3		Industrial (-40°C to 85°C)
			AT22V10-15FI	24C		
			AT22V10-15GI	24D3		
AT22V10-15JI	28J					
AT22V10-15KI	28KW					
AT22V10-15LI	28LW					
AT22V10-15NI	28L					
AT22V10-15PI	24P3					
AT22V10-15SI	24S					
AT22V10-15YI	24CW					
AT22V10-15DM	24DW3	Military (-55°C to 125°C)				
AT22V10-15FM	24C					
AT22V10-15GM	24D3					
AT22V10-15KM	28KW					
AT22V10-15LM	28LW					
AT22V10-15NM	28L					
AT22V10-15YM	24CW					
AT22V10-15DM/883	24DW3	Military/883C (-55°C to 125°C) Class B, Fully Compliant				
AT22V10-15FM/883	24C					
AT22V10-15GM/883	24D3					
AT22V10-15KM/883	28KW					
AT22V10-15LM/883	28LW					
AT22V10-15NM/883	28L					
AT22V10-15YM/883	24CW					
20	12	15	AT22V10-20DC	24DW3	Commercial (0°C to 70°C)	
			AT22V10-20FC	24C		
			AT22V10-20GC	24D3		
			AT22V10-20JC	28J		
			AT22V10-20KC	28KW		
			AT22V10-20LC	28LW		
			AT22V10-20NC	28L		
			AT22V10-20PC	24P3		
			AT22V10-20SC	24S		
			AT22V10-20YC	24CW		

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Ordering Information

tpd (ns)	ts (ns)	tco (ns)	Ordering Code	Package	Operation Range	
20	12	15	AT22V10-20DI	24DW3	Industrial (-40°C to 85°C)	
			AT22V10-20FI	24C		
			AT22V10-20GI	24D3		
			AT22V10-20JI	28J		
			AT22V10-20KI	28KW		
			AT22V10-20LI	28LW		
			AT22V10-20NI	28L		
			AT22V10-20PI	24P3		
			AT22V10-20SI	24S		
			AT22V10-20YI	24CW		
20	17	15	AT22V10-20DM	24DW3	Military (-55°C to 125°C)	
			AT22V10-20FM	24C		
			AT22V10-20GM	24D3		
			AT22V10-20KM	28KW		
			AT22V10-20LM	28LW		
		AT22V10-20NM	28L			
		AT22V10-20YM	24CW			
		15	883	AT22V10-20DM/883	24DW3	Military/883C (-55°C to 125°C) Class B, Fully Compliant
				AT22V10-20FM/883	24C	
				AT22V10-20GM/883	24D3	
AT22V10-20KM/883	28KW					
AT22V10-20LM/883	28LW					
AT22V10-20NM/883	28L					
AT22V10-20YM/883	24CW					
25	15	15	AT22V10-25DC	24DW3	Commercial (0°C to 70°C)	
			AT22V10-25FC	24C		
			AT22V10-25GC	24D3		
			AT22V10-25JC	28J		
			AT22V10-25KC	28KW		
			AT22V10-25LC	28LW		
			AT22V10-25NC	28L		
			AT22V10-25PC	24P3		
			AT22V10-25SC	24S		
			AT22V10-25YC	24CW		
		883	25	AT22V10-25DI	24DW3	Industrial (-40°C to 85°C)
				AT22V10-25FI	24C	
				AT22V10-25GI	24D3	
				AT22V10-25JI	28J	
				AT22V10-25KI	28KW	
AT22V10-25LI	28LW					
AT22V10-25NI	28L					
AT22V10-25PI	24P3					
AT22V10-25SI	24S					
AT22V10-25YI	24CW					

Ordering Information

tpd (ns)	ts (ns)	tco (ns)	Ordering Code	Package	Operation Range
25	18	15	AT22V10-25DM AT22V10-25FM AT22V10-25GM AT22V10-25KM AT22V10-25LM AT22V10-25NM AT22V10-25YM	24DW3 24C 24D3 28KW 28LW 28L 24CW	Military (-55°C to 125°C)
			AT22V10-25DM/883 AT22V10-25FM/883 AT22V10-25GM/883 AT22V10-25KM/883 AT22V10-25LM/883 AT22V10-25NM/883 AT22V10-25YM/883	24DW3 24C 24D3 28KW 28LW 28L 24CW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
30	20	20	AT22V10-30DM AT22V10-30FM AT22V10-30GM AT22V10-30KM AT22V10-30LM AT22V10-30NM AT22V10-30YM	24DW3 24C 28D3 28KW 28LW 28L 24CW	Military (-55°C to 125°C)
			AT22V10-30DM/883 AT22V10-30FM/883 AT22V10-30GM/883 AT22V10-30KM/883 AT22V10-30LM/883 AT22V10-30NM/883 AT22V10-30YM/883	24DW3 24C 24D3 28KW 28LW 28L 24CW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
35	25	25	AT22V10-35DC AT22V10-35FC AT22V10-35GC AT22V10-35JC AT22V10-35KC AT22V10-35LC AT22V10-35NC AT22V10-35PC AT22V10-35SC AT22V10-35YC	24DW3 24C 24D3 28J 28KW 28LW 28L 24P3 24S 24CW	Commercial (0°C to 70°C)
			AT22V10-35DI AT22V10-35FI AT22V10-35GI AT22V10-35JI AT22V10-35KI AT22V10-35LI AT22V10-35NI AT22V10-35PI AT22V10-35SI AT22V10-35YI	24DW3 24C 24D3 28J 28KW 28LW 28L 24P3 24S 24CW	Industrial (-40°C to 85°C)



Ordering Information

t _{PD} (ns)	t _s (ns)	t _{CO} (ns)	Ordering Code	Package	Operation Range
20	17	15	5962-87539 04 LX 5962-87539 04 3X	24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
25	18	15	5962-87539 01 KX 5962-87539 01 LX 5962-87539 01 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
30	20	20	5962-87539 02 KX 5962-87539 02 LX 5962-87539 02 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
40	30	25	5962-87539 03 KX 5962-87539 03 LX 5962-87539 03 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
15	10	10	5962-88670 05 LX 5962-88670 05 3X	24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
20	17	15	5962-88670 04 KX 5962-88670 04 LX 5962-88670 04 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
25	18	15	5962-88670 01 KX 5962-88670 01 LX 5962-88670 01 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
30	20	20	5962-88670 02 KX 5962-88670 02 LX 5962-88670 02 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
40	30	25	5962-88670 03 KX 5962-88670 03 LX 5962-88670 03 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant

Package Type

24DW3	24 Lead, 0.300" Wide, Windowed, Ceramic Dual Inline Package (Cerdip)
24C	24 Lead, Non-Windowed, Ceramic Flat Package (Cerpack)
24D3	24 Lead, 0.300" Wide, Non-Windowed (OTP), Ceramic Dual Inline Package (Cerdip)
28J	28 Lead, Plastic J-Leaded Chip Carrier OTP (PLCC)
28KW	28 Lead, Windowed, Ceramic J-Leaded Chip Carrier (JLCC)
28LW	28 Pad, Windowed, Ceramic Leadless Chip Carrier (LCC)
28L	28 Pad, Non-Windowed, Ceramic Leadless Chip Carrier OTP (LCC)
24P3	24 Lead, 0.300" Wide, Plastic Dual Inline Package OTP (PDIP)
24S	24 Lead, 0.300" Wide, Plastic Gull Wing Small Outline OTP (SOIC)
24CW	24 Lead, Windowed, Ceramic Flat Package (Cerpack)

Ordering Information

tpd (ns)	ts (ns)	tco (ns)	Ordering Code	Package	Operation Range
20	12	15	AT22V10L-20DC	24DW3	Commercial (0°C to 70°C)
			AT22V10L-20FC	24C	
			AT22V10L-20GC	24D3	
			AT22V10L-20JC	28J	
			AT22V10L-20KC	28KW	
			AT22V10L-20LC	28LW	
			AT22V10L-20NC	28L	
		AT22V10L-20PC	24P3		
		AT22V10L-20SC	24S		
		AT22V10L-20YC	24CW		
		AT22V10L-20DI	24DW3	Industrial (-40°C to 85°C)	
		AT22V10L-20FI	24C		
		AT22V10L-20GI	24D3		
		AT22V10L-20JI	28J		
AT22V10L-20KI	28KW				
AT22V10L-20LI	28LW				
AT22V10L-20NI	28L				
AT22V10L-20PI	24P3				
AT22V10L-20SI	24S				
AT22V10L-20YI	24CW				
20	17	15	AT22V10L-20DM	24DW3	Military (-55°C to 125°C)
			AT22V10L-20FM	24C	
			AT22V10L-20GM	24D3	
			AT22V10L-20KM	28KW	
			AT22V10L-20LM	28LW	
		AT22V10L-20NM	28L		
		AT22V10L-20YM	24CW		
		AT22V10L-20DM/883	24DW3	Military/883C (-55°C to 125°C) Class B, Fully Compliant	
		AT22V10L-20FM/883	24C		
		AT22V10L-20GM/883	24D3		
AT22V10L-20KM/883	28KW				
AT22V10L-20LM/883	28LW				
AT22V10L-20NM/883	28L				
AT22V10L-20YM/883	24CW				
25	15	15	AT22V10L-25DC	24DW3	Commercial (0°C to 70°C)
			AT22V10L-25FC	24C	
			AT22V10L-25GC	24D3	
			AT22V10L-25JC	28J	
			AT22V10L-25KC	28KW	
			AT22V10L-25LC	28LW	
			AT22V10L-25NC	28L	
			AT22V10L-25PC	24P3	
			AT22V10L-25SC	24S	
			AT22V10L-25YC	24CW	



Ordering Information

t _{PD} (ns)	t _s (ns)	t _{CO} (ns)	Ordering Code	Package	Operation Range	
25	15	15	AT22V10L-25DI	24DW3	Industrial (-40°C to 85°C)	
			AT22V10L-25FI	24C		
			AT22V10L-25GI	24D3		
			AT22V10L-25JI	28J		
			AT22V10L-25KI	28KW		
			AT22V10L-25LI	28LW		
			AT22V10L-25NI	28L		
			AT22V10L-25PI	24P3		
			AT22V10L-25SI	24S		
			AT22V10L-25YI	24CW		
25	18	15	AT22V10L-25DM	24DW3	Military (-55°C to 125°C)	
			AT22V10L-25FM	24C		
			AT22V10L-25GM	24D3		
			AT22V10L-25KM	28KW		
			AT22V10L-25LM	28LW		
		AT22V10L-25NM	28L			
		AT22V10L-25YM	24CW			
		15	15	AT22V10L-25DM/883	24DW3	Military/883C (-55°C to 125°C) Class B, Fully Compliant
				AT22V10L-25FM/883	24C	
				AT22V10L-25GM/883	24D3	
AT22V10L-25KM/883	28KW					
AT22V10L-25LM/883	28LW					
AT22V10L-25NM/883	28L					
AT22V10L-25YM/883	24CW					
30	20	20	AT22V10L-30DM	24DW3	Military (-55°C to 125°C)	
			AT22V10L-30FM	24C		
			AT22V10L-30GM	24D3		
			AT22V10L-30KM	28KW		
			AT22V10L-30LM	28LW		
		AT22V10L-30NM	28L			
		AT22V10L-30YM	24CW			
		20	20	AT22V10L-30DM/883	24DW3	Military/883C (-55°C to 125°C) Class B, Fully Compliant
				AT22V10L-30FM/883	24C	
				AT22V10L-30GM/883	24D3	
AT22V10L-30KM/883	28KW					
AT22V10L-30LM/883	28LW					
AT22V10L-30NM/883	28L					
AT22V10L-30YM/883	24CW					
35	25	25	AT22V10L-35DC	24DW3	Commercial (0°C to 70°C)	
			AT22V10L-35FC	24C		
			AT22V10L-35GC	24D3		
			AT22V10L-35JC	28J		
			AT22V10L-35KC	28KW		
			AT22V10L-35LC	28LW		
			AT22V10L-35NC	28L		
			AT22V10L-35PC	24P3		
			AT22V10L-35SC	24S		
			AT22V10L-35YC	24CW		

Ordering Information

t _{PD} (ns)	t _s (ns)	t _{CO} (ns)	Ordering Code	Package	Operation Range
35	25	15	AT22V10L-35DI AT22V10L-35FI AT22V10L-35GI AT22V10L-35JI AT22V10L-35KI AT22V10L-35LI AT22V10L-35NI AT22V10L-35PI AT22V10L-35SI AT22V10L-35YI	24DW3 24C 24D3 28J 28KW 28LW 28L 24P3 24S 24CW	Industrial (-40°C to 85°C)
20	17	15	5962-88724 04 KX 5962-88724 04 LX 5962-88724 04 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
25	18	15	5962-88724 01 KX 5962-88724 01 LX 5962-88724 01 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
30	20	20	5962-88724 02 KX 5962-88724 02 LX 5962-88724 02 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
40	30	25	5962-88724 03 KX 5962-88724 03 LX 5962-88724 03 3X	24CW 24DW3 28LW	Military/883C (-55°C to 125°C) Class B, Fully Compliant
20	17	15	5962-89755 04 KX 5962-89755 04 LX 5962-89755 04 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
25	18	15	5962-89755 01 KX 5962-89755 01 LX 5962-89755 01 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
30	20	20	5962-89755 02 KX 5962-89755 02 LX 5962-89755 02 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant
40	30	25	5962-89755 03 KX 5962-89755 03 LX 5962-89755 03 3X	24C 24D3 28L	Military/883C (-55°C to 125°C) Class B, Fully Compliant

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Package Type

24DW3	24 Lead, 0.300" Wide, Windowed, Ceramic Dual Inline Package (Cerdip)
24C	24 Lead, Non-Windowed, Ceramic Flat Package (Cerpack)
24D3	24 Lead, 0.300" Wide, Non-Windowed (OTP), Ceramic Dual Inline Package (Cerdip)
28J	28 Lead, Plastic J-Leaded Chip Carrier OTP (PLCC)
28KW	28 Lead, Windowed, Ceramic J-Leaded Chip Carrier (JLCC)
28LW	28 Pad, Windowed, Ceramic Leadless Chip Carrier (LCC)
28L	28 Pad, Non-Windowed, Ceramic Leadless Chip Carrier OTP (LCC)
24P3	24 Lead, 0.300" Wide, Plastic Dual Inline Package OTP (PDIP)
24S	24 Lead, 0.300" Wide, Plastic Gull Wing Small Outline OTP (SOIC)
24CW	24 Lead, Windowed, Ceramic Flat Package (Cerpack)

