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(Note: Microdot may be in either location)

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MAXIMUM RATINGS

Symbol	Parameter		Value	Unit
V_{CC}	DC Supply Voltage		−0.5 to +7.0	V
V_{IN}	Control Pin Input Voltage		−0.5 to +7.0	V
$V_{I/O}$	Switch Input / Output Voltage		−0.5 to +7.0	V
I_{IK}	Control Pin DC Input Diode Current	V_{IN} < GND	−50	mA
I_{OK}	Switch I/O Port DC Diode Current	$V_{I/O}$ < GND	−50	mA
I_O	ON−State Switch Current		±128	mA
	Continuous Current Through V_{CC} or GND		±150	mA
I_{CC}	DC Supply Current Per Supply Pin		±150	mA
I_{GND}	DC Ground Current per Ground Pin		±150	mA
T_{STG}	Storage Temperature Range		−65 to +150	C
T_L	Lead Temperature, 1 mm from Case for 10 Seconds		260	C
T_J	Junction Temperature Under Bias		150	C
θ_{JA}	Thermal Resistance	UDFN8 (Note 1) Micro8 TSSOP8	111 392 150	C/W
P_D	Power Dissipation in Still Air at 85 C	UDFN8 Micro8 TSSOP8	1127 319 833	mW
MSL	Moisture Sensitivity		Level 1	
F_R	Flammability Rating Oxygen Index: 28 to 34		UL 94 V−0 @ 0.125 in	
V_{ESD}	ESD Withstand Voltage (Note 2)	Human Body Model, all pins Human Body Model, A_n/B_n to Ground Human Body Model, A_n/B_n to V_{CC}	> 1.5 > 4 > 4	kV kV kV
$I_{LATCHUP}$	Latchup Performance Above V_{CC} and Below GND at 125 C (Note 3)		±100	mA

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device

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DC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Conditions	V_{CC} (V)	T_A = 25°C Min	Typ	Max	T_A = −55°C to +125°C Min	Max	Unit
V_{IK}	Clamp Diode Voltage	$I_{I/O}$ = −18 mA	4.5			−1.2		−1.2	V
V_{IH}	High−Level Input Voltage (Control)		4.0 to 5.5	2.0			2.0		V
V_{IL}	Low−Level Input Voltage (Control)		4.0 to 5.5			0.8		0.8	V
V_{OH}	Output Voltage High	See Figure 4							
I_{IN}	Input Leakage Current	$0 \leq V_{IN} \leq 5.5$ V	5.5			±0.1		±1.0	μA
I_{OFF}	Power Off Leakage Current	$V_{I/O}$ = 0 to 5.5 V	0			±0.1		±1.0	μA
I_{CC}	Quiescent Supply Current	I_O = 0, V_{IN} = V_{CC} or 0 V							

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AC LOADING AND WAVEFORMS

Parameter Measurement Information

Test	S1
t_{PD}	Open
t_{PLZ}/t_{PZL}	7 V
t_{PHZ}/t_{PZH}	Open

*C_L includes probes and jig capacitance.
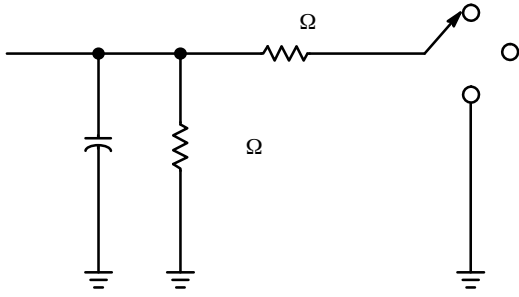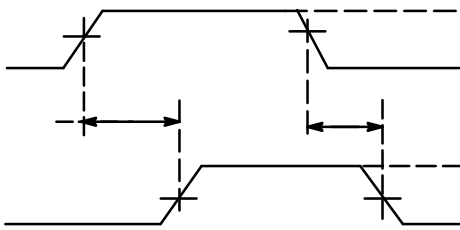
**Voltage Waveforms
Propagation Delay Times**
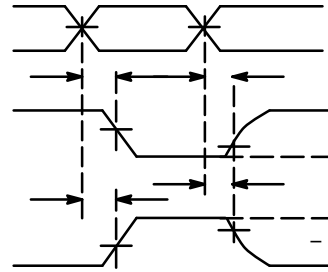
**Voltage Waveforms
Enable and Disable Times**

4. Waveform 1 is for an output with internal conditions such that the output is low, except when disabled by the output control.
   Waveform 2 is for an output with internal conditions such that the output is high, except when disabled by the output control
5. All input pulses are supplied by generators having the following characteristics: PRR $\leq$ 10 MHz, Z_O = 50 Ω, $t_r \leq$ 2.5 ns, $t_f \leq$ 2.5 ns.
6. The outputs are measured one at a time, with one transition per measurement.
7. t_{PLZ} and t_{PHZ} are the same as t_{DIS}.
8. t_{PZL} and t_{PZH} are the same as t_{EN}.
9. t_{PHL} and t_{PLH} are the same as t_{PD}.

Figure 5. t_{PD}, t_{EN}, t_{DIS} Loading and Waveforms

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ORDERING INFORMATION

Device	Package	Shipping

UDFN8 1.8x1.2, 0.4P
CASE 517AJ
ISSUE O

DATE 08 NOV 2006

SCALE 4:1

NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. DIMENSION b APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.15 AND 0.30 mm FROM TERMINAL TIP.
4. MOLD FLASH ALLOWED ON TERMINALS ALONG EDGE OF PACKAGE. FLASH MAY NOT EXCEED 0.03 ONTO BOTTOM SURFACE OF TERMINALS.
5. DETAIL A SHOWS OPTIONAL CONSTRUCTION FOR TERMINALS.