

DS006491

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## Absolute Maximum Ratings(Note 1)

Supply Voltage	7V
Input Voltage	5.5V
Output Voltage	7V
Operating Free Air Temperature Range	$0^{\circ}C$ to $+70^{\circ}C$
Storage Temperature Range	–65°C to +150°C

Note 1: The "Absolute Maximum Ratings" are those values beyond which the safety of the device cannot be guaranteed. The device should not be operated at these limits. The parametric values defined in the Electrical Characteristics tables are not guaranteed at the absolute maximum ratings. The "Recommended Operating Conditions" table will define the conditions for actual device operation.

## **Recommended Operating Conditions**

Symbol	Parameter	Min	Nom	Max	Units	
V <sub>CC</sub>	Supply Voltage	4.75	5	5.25	V	
V <sub>IH</sub>	HIGH Level Input Voltage	2			V	
V <sub>IL</sub>	LOW Level Input Voltage			0.8	V	
V <sub>OH</sub>	HIGH Level Output Voltage			5.5	V	
I <sub>OL</sub>	LOW Level Output Current			20	mA	
T <sub>A</sub>	Free Air Operating Temperature	0	ß	70	°C	
Electrical Characteristics						

## **Electrical Characteristics**

Symbol	Parameter	Conditions	Min	Typ (Note 2)	Max	Units
VI	Input Clamp Voltage	$V_{CC} = Min, I_I = -18 \text{ mA}$			-1.2	V
I <sub>CEX</sub>	HIGH Level Output Current	$V_{CC} = Min, V_O = 5.5V$ $V_{IL} = Max$			250	μΑ
V <sub>OL</sub>	LOW Level Output Voltage	V <sub>CC</sub> = Min, I <sub>OL</sub> = Max V <sub>IH</sub> = Min			0.5	V
l	Input Current @ Max Input Voltage	$V_{CC} = Max$ , $V_1 = 5.5V$			1	mA
н	HIGH Level Input Current	$V_{CC} = Max, V_I = 2.7V$			50	μΑ
IL	LOW Level Input Current	$V_{CC} = Max, V_I = 0.5V$			-2	mA
ссн	Supply Current with Outputs HIGH	V <sub>CC</sub> = Max		6.0	13.2	mA
CCL	Supply Current with Outputs LOW	V <sub>CC</sub> = Max		20	36	mA

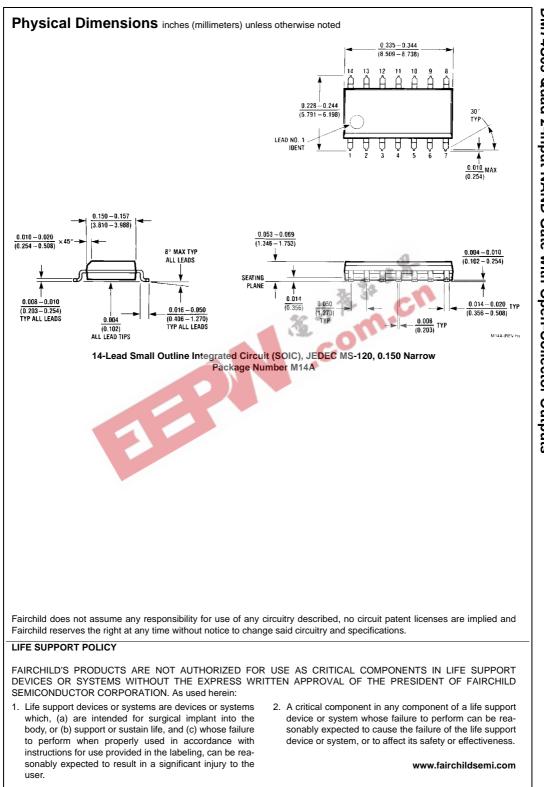
Note 2: All typicals are at  $V_{CC} = 5V$ ,  $T_A = 25^{\circ}C$ .

## **Switching Characteristics**

at V\_{CC} = 5V and T\_A = 25^{\circ}C

	Parameter	<b>R</b> <sub>L</sub> = <b>280</b> Ω				
Symbol		C <sub>L</sub> = 15 pF		C <sub>L</sub> = 50 pF		Units
		Min	Max	Min	Max	
	Propagation Delay Time	2	7.5	3	11	ns
	LOW-to-HIGH Level Output Propagation Delay Time	2	7	3	11	ns
	HIGH-to-LOW Level Output	-	,	Ū		110

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