

DM7417 Hex Buffers with High Voltage Open-Collector Outputs

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DM7417

Absolute Maximum Ratings(Note 1)

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 _{CC}	Supply Voltage	4.75	5	5.25	V
V _{IH}	HIGH Level Input Voltage	2			V
V _{IL}	LOW Level Input Voltage			0.8	V
V _{ОН}	HIGH Level Output Voltage			15	V
I _{OL}	LOW Level Output Current			40	mA
T _A	Free Air Operating Temperature	0		70	°C

Electrical Characteristics

over recommended operating free air temperature range (unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ (Note 2)	Max	Units
VI	Input Clamp Voltage	$V_{CC} = Min, I_I = -12 mA$			-1.5	V
ICEX	HIGH Level Output Current	$V_{CC} = Min, V_O = 15V$ $V_{IH} = Min$			250	μΑ
V _{OL}	LOW Level Output Voltage	V _{CC} = Min, I _{OL} = Max V _{IL} = Max			0.7	V
		$I_{OL} = 16 \text{ mA}, V_{CC} = \text{Min}$			0.4	
l _l	Input Current @ Max Input Voltage	$V_{CC} = Max, V_I = 5.5V$			1	mA
I _{IH}	HIGH Level Input Current	$V_{CC} = Max, V_I = 2.4V$			40	μA
IIL	LOW Level Input Current	$V_{CC} = Max, V_I = 0.4V$			-1.6	mA
I _{CCH}	Supply Current with Outputs HIGH	V _{CC} = Max		29	41	mA
I _{CCL}	Supply Current with Outputs LOW	V _{CC} = Max		21	30	mA

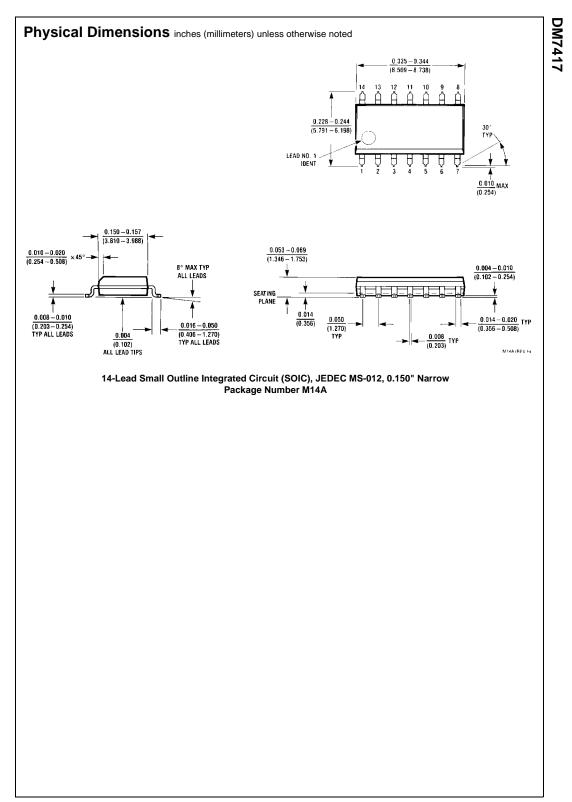
Note 2: All typicals are at V_{CC} = 5V, T_A = 25^{\circ}C.

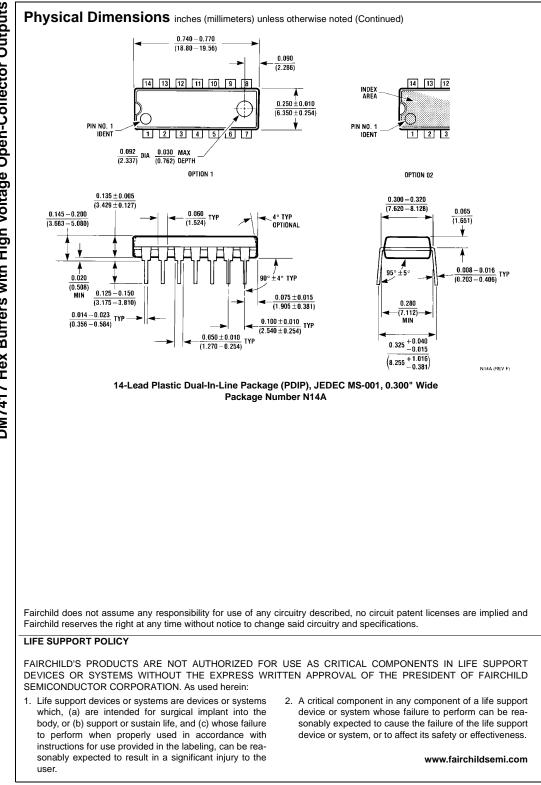
Switching Characteristics

at $V_{CC} = 5V$ and $T_A = 25^{\circ}C$

Symbol	Parameter	Conditions	Min	Max	Units
t _{PLH}	Propagation Delay Time	C _L = 15 pF		10	20
	LOW-to-HIGH Level Output	$R_L = 110\Omega$		10	ns
t _{PHL}	Propagation Delay Time			30	ns
	HIGH-to-LOW Level Output		30	50	115

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