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RRD-B30M105/Printed in U. S. A.

Absolute Maximum Ratings (Note)

If Military/Aerospace specified devices are required, please contact the National Semiconductor Sales Office/Distributors for availability and specifications. Supply Voltage 8V

St	ippiy voitage	87
In	out Voltage	5.5V
Op	perating Free Air Temperature Range	
	DM54L	-55°C to +125°C
St	orage Temperature Range	-65° C to $+150^{\circ}$ C

Note: 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" table 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		Units		
Cymbol		Min	Nom	Max	Onits
V _{CC}	Supply Voltage	4.5	5	5.5	v
VIH	High Level Input Voltage	2			v
VIL	Low Level Input Voltage			0.7	v
I _{OH}	High Level Output Current			-0.2	mA
I _{OL}	Low Level Output Current			2	mA
T _A	Free Air Operating Temperature	-55		125	°C

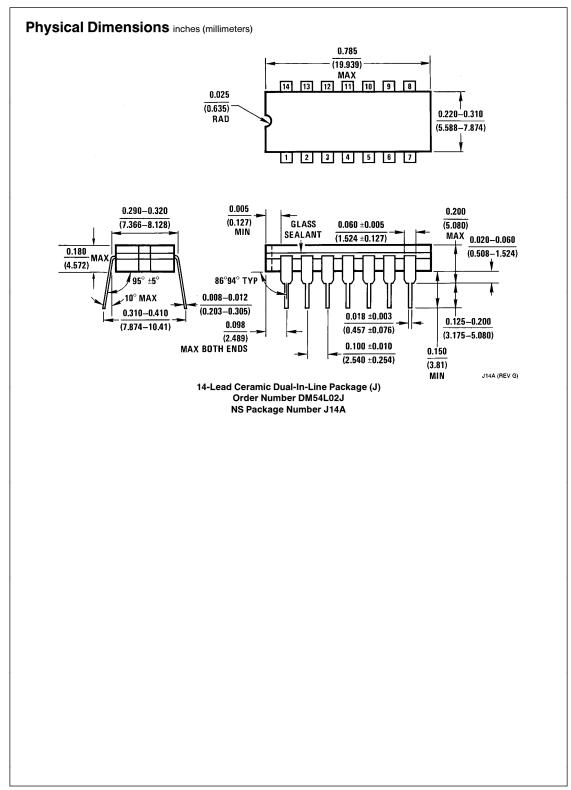
Electrical Characteristics over recommended operating free air temperature (unless otherwise noted)

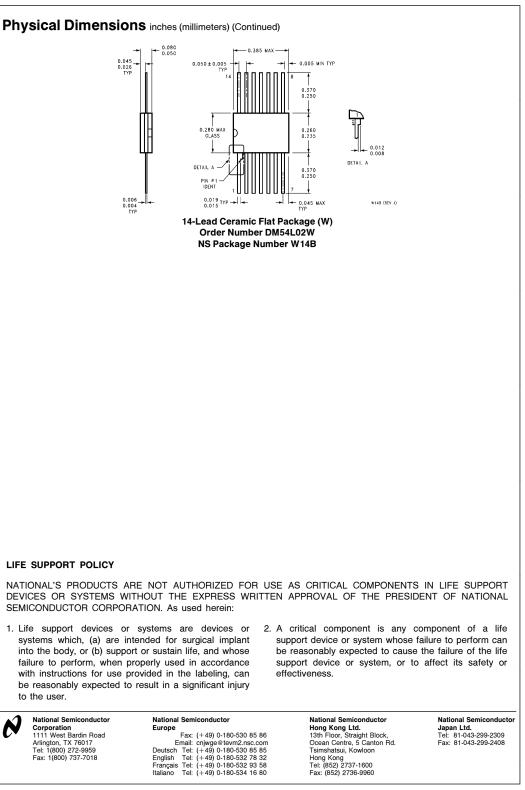
Symbol	Parameter	Conditions	Min	Typ (Note 1)	Мах	Unite
V _{OH}	High Level Output Voltage	$V_{CC} = Min, I_{OH} = Max$ $V_{IL} = Max$	2.4	3.3		v
V _{OL}	Low Level Output Voltage	$V_{CC} = Min, I_{OL} = Max$ $V_{IH} = Min$		0.15	0.3	v
lı	Input Current @ Max Input Voltage	$V_{CC} = Max, V_I = 5.5V$			0.1	mA
Ι _{ΙΗ}	High Level Input Current	$V_{CC} = Max, V_1 = 2.4V$			10	μΑ
Ι _{ΙL}	Low Level Input Current	$V_{CC} = Max, V_I = 0.3V$			-0.18	mA
I _{OS}	Short Circuit Output Current	V _{CC} = Max (Note 2)	-3		-15	mA
ICCH	Supply Current with Outputs High	V _{CC} = Max		0.8	1.6	mA
ICCL	Supply Current with Outputs Low	V _{CC} = Max		1.4	2.6	mA

Symbol	Parameter	Conditions	Min	Мах	Units
t _{PLH}	Propagation Delay Time Low to High Level Output	$R_{L} = 4 k\Omega$ $C_{L} = 50 pF$		60	ns
tPHL	Propagation Delay Time High to Low Level Output			60	ns

Note 1: All typicals are at V_{CC} = 5V, T_A = 25°C.

Note 2: Not more than one output should be shorted at a time.





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