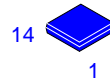


MARKING
DIAGRAMS



TSSOP-14
DT SUFFIX
CASE 948G

CC = 3.0 V

- Near Zero Static Supply Current in All Three Logic States (10 μ A)
Substantially Reduces System Power Requirements
- Latchup Performance Exceeds 100 mA
- ESD Performance: Human Body Model >2000 V
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

MC74LCX74

MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V			

MC74LCX74

DC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Conditions	V _{CC} (V)	T _A = -40°C to +85°C		T _A = -40°C to +125°C		Unit
				Min	Max	Min	Max	
V _{IH}	HIGH Level Input Voltage		1.65 – 1.95	0.65 x V _{CC}	–	0.65 x V _{CC}	–	V
			2.3 – 2.7	1.7	–	1.7	–	
			3.0 – 3.6	2.0	–	2.0	–	
			4.5 – 5.5	0.70 x V _{CC}	–	0.70 x V _{CC}	–	
V _{IL}	LOW Level Input Voltage		1.65 – 1.95	–	0.35 x V _{CC}	–	0.35 x V _{CC}	V
			2.3 – 2.7	–	0.7	–	0.7	
			3.0 – 3.6	–	0.8	–	0.8	
			4.5 – 5.5	–	0.30 x V _{CC}	–	0.30 x V _{CC}	
V _{OH}	High-Level Output Voltage	V _{CC}						

MC74LCX74

AC ELECTRICAL CHARACTERISTICS (continued)

Symbol	Parameter	Test Condition	V _{CC} (V)	T _A = -40°C to +85°C		T _A = -40°C to +125°C		Unit
				Min	Max	Min	Max	
f _{max}	Clock Pulse Frequency	Waveform 1	1.65 to 1.95	90	-	90	-	MHz
			2.3 to 2.7	150	-	150	-	
			2.7	150	-	150	-	
			3.0 to 3.6	150	-	150	-	
			4.5 to 5.5	150	-	150	-	
t _s	Setup Time, HIGH or LOW Dn to CPn	Waveform 1	1.65 to 1.95	4.0	-	4.0	-	

MC74LCX74

DYNAMIC SWITCHING CHARACTERISTICS

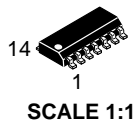
Symbol	Characteristic	Condition	T _A = +25°C			Units
			Min	Typ	Max	
V _{OLP}	Dynamic LOW Peak Voltage (Note 6)	V _{CC} = 3.3 V, C _L = 50 pF, V _{IH} = 3.3 V, V _{IL} = 0 V		0.8		V
		V _{CC} = 2.5 V, C _L = 30 pF, V _{IH} = 2.5 V, V _{IL} = 0 V		0.6		V
V _{OLV}	Dynamic LOW Valley Voltage (Note 6)	V _{CC} = 3.3 V, C _L = 50 pF, V _{IH} = 3.3 V, V _{IL} = 0 V		-0.8		V
		V _{CC} = 2.5 V, C _L = 30 pF, V _{IH} = 2.5 V, V _{IL} = 0 V		-0.6		V

6. Number of outputs defined as "n". Measured with "n-1" outputs switching from HIGH-to-LOW or LOW-to-HIGH. The remaining output is measured in the LOW state.

CAPACITIVE CHARACTERISTICS

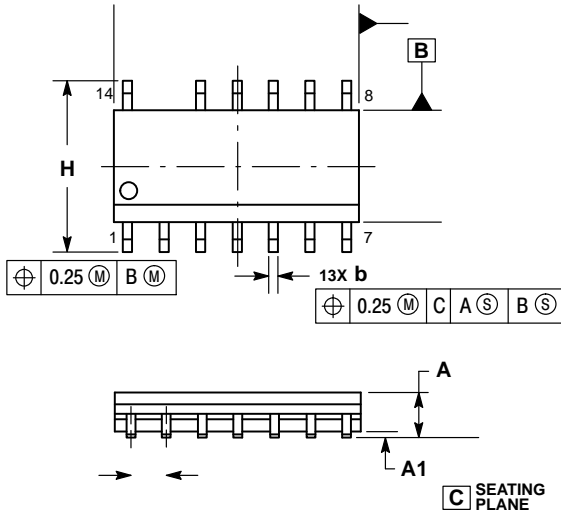
Symbol	Parameter	Condition	Typical	Units
C _{IN}	Input Capacitance	V _{CC} = 3.3 V, V _I = 0 V or V _{CC}	7	pF
C _{OUT}	Output Capacitance	V _{CC} = 3.3 V, V _I = 0 V or V _{CC}	8	pF
C _{PD}	Power Dissipation Capacitance	10 MHz, V _{CC} = 3.3 V, V _I = 0 V or V _{CC}	25	pF





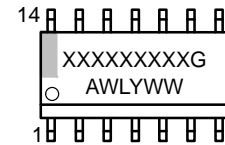
SOIC 14 NB
CASE 751A-03
ISSUE L

DATE 03 FEB 2016



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
 2. CONTROLLING DIMENSION: MILLIMETERS.
 3. DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE PROTRUSION SHALL BE 0.13 TOTAL IN EXCESS OF AT MAXIMUM MATERIAL CONDITION.
 4. DIMENSIONS D AND E DO NOT INCLUDE MOLD PROTRUSIONS.
 5. MAXIMUM MOLD PROTRUSION 0.15 PER SIDE.

GENERIC MARKING DIAGRAM*



- XXXXXX = Specific Device Code
- A = Assembly Location
- WL = Wafer Lot
- Y = Year
- WW = Work Week
- G = Pb-Free Package

STYLES ON PAGE 2

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STYLE 7:
PIN 1. ANODE/CATHODE
2. COMMON ANODE
3. COMMON CATHODE
4. ANODE/CATHODE
5. ANODE/CATHODE

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