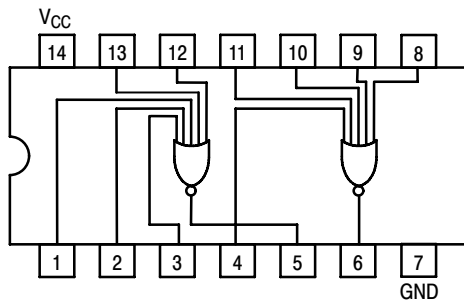


SN74LS260

Dual 5-Input NOR Gate



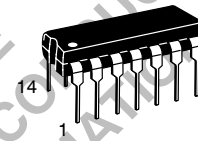
ON Semiconductor™

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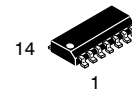
LOW
POWER
SCHOTTKY

GUARANTEED OPERATING RANGES

| Symbol | Parameter | Min | Typ | Max | Unit |
|----------|-------------------------------------|------|-----|------|------|
| V_{CC} | Supply Voltage | 4.75 | 5.0 | 5.25 | V |
| T_A | Operating Ambient Temperature Range | 0 | 25 | 70 | °C |
| I_{OH} | Output Current - High | | | -0.4 | mA |
| I_{OL} | Output Current - Low | | | 8.0 | mA |



PLASTIC
N SUFFIX
CASE 646



SOIC
D SUFFIX
CASE 751A

ORDERING INFORMATION

| Device | Package | Shipping |
|--------------|------------|------------------|
| SN74LS260N | 14 Pin DIP | 2000 Units/Box |
| SN74LS260D | SOIC-14 | 55 Units/Rail |
| SN74LS260DR2 | SOIC-14 | 2500/Tape & Reel |

SN74LS260

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

| Symbol | Parameter | Limits | | | Unit | Test Conditions | |
|-----------------|---|--------|-------|------|------|--|---|
| | | Min | Typ | Max | | | |
| V _{IH} | Input HIGH Voltage | 2.0 | | | V | Guaranteed Input HIGH Voltage for All Inputs | |
| V _{IL} | Input LOW Voltage | | | 0.8 | V | Guaranteed Input LOW Voltage for All Inputs | |
| V _{IK} | Input Clamp Diode Voltage | | -0.65 | -1.5 | V | V _{CC} = MIN, I _{IN} = -18 mA | |
| V _{OH} | Output HIGH Voltage | 2.7 | 3.5 | | V | V _{CC} = MIN, I _{OH} = MAX, V _{IN} = V _{IH} or V _{IL} per Truth Table | |
| V _{OL} | Output LOW Voltage | | 0.25 | 0.4 | V | I _{OL} = 4.0 mA I _{OL} = 8.0 mA | V _{CC} = V _{CC} MIN, V _{IN} = V _{IL} or V _{IH} per Truth Table |
| | | | 0.35 | 0.5 | V | | |
| I _{IH} | Input HIGH Current | | | 20 | μA | V _{CC} = MAX, V _{IN} = 2.7 V | |
| | | | | 0.1 | mA | V _{CC} = MAX, V _{IN} = 7.0 V | |
| I _{IL} | Input LOW Current | | | -0.4 | mA | V _{CC} = MAX, V _{IN} = 0.4 V | |
| I _{OS} | Short Circuit Current (Note 1) | -20 | | -100 | mA | V _{CC} = MAX | |
| I _{CC} | Power Supply Current Total, Output HIGH Total, Output LOW | | | 4.0 | mA | V _{CC} = MAX | |
| | | | | 5.5 | | | |

Note 1: Not more than one output should be shorted at a time, nor for more than 1 second.

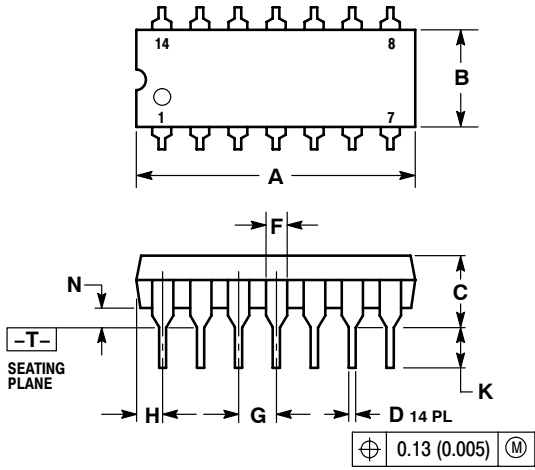
AC CHARACTERISTICS (T_A = 25°C)

| Symbol | Parameter | Limits | | | Unit | Test Conditions |
|------------------|---------------------------------|--------|-----|-----|------|---|
| | | Min | Typ | Max | | |
| t _{PLH} | Turn-Off Delay, Input to Output | | 5.0 | 15 | ns | V _{CC} = 5.0 V C _L = 15 pF |
| t _{PHL} | Turn-On Delay, Input to Output | | 6.0 | 15 | ns | |

SN74LS260

PACKAGE DIMENSIONS

N SUFFIX PLASTIC PACKAGE CASE 646-06 ISSUE M

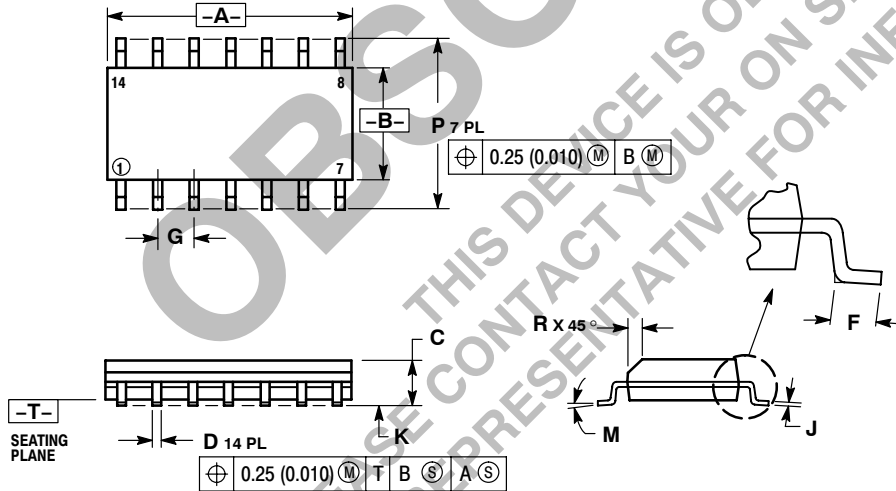


NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. DIMENSION L TO CENTER OF LEADS WHEN FORMED PARALLEL.
4. DIMENSION B DOES NOT INCLUDE MOLD FLASH.
5. ROUNDED CORNERS OPTIONAL.

| DIM | INCHES | | MILLIMETERS | |
|-----|--------------------|-----------------|-------------|-----------------|
| | MIN | MAX | MIN | MAX |
| A | 0.715 | 0.770 | 18.16 | 18.80 |
| B | 0.240 | 0.260 | 6.10 | 6.60 |
| C | 0.145 | 0.185 | 3.69 | 4.69 |
| D | 0.015 | 0.021 | 0.38 | 0.53 |
| F | 0.040 | 0.070 | 1.02 | 1.78 |
| G | 0.100 BSC 2.54 BSC | | | |
| H | 0.052 | 0.095 | 1.32 | 2.41 |
| J | 0.008 | 0.015 | 0.20 | 0.38 |
| K | 0.115 | 0.135 | 2.92 | 3.43 |
| L | 0.290 | 0.310 | 7.37 | 7.87 |
| M | --- | 10 ^o | --- | 10 ^o |
| N | 0.015 | 0.039 | 0.38 | 1.01 |

D SUFFIX PLASTIC SOIC PACKAGE CASE 751A-03 ISSUE F



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. DIMENSIONS A AND B DO NOT INCLUDE MOLD PROTRUSION.
4. MAXIMUM MOLD PROTRUSION 0.15 (0.006) PER SIDE.
5. DIMENSION D DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.127 (0.005) TOTAL IN EXCESS OF THE D DIMENSION AT MAXIMUM MATERIAL CONDITION.

| DIM | MILLIMETERS | | INCHES | |
|-----|----------------|----------------|----------------|----------------|
| | MIN | MAX | MIN | MAX |
| A | 8.55 | 8.75 | 0.337 | 0.344 |
| B | 3.80 | 4.00 | 0.150 | 0.157 |
| C | 1.35 | 1.75 | 0.054 | 0.068 |
| D | 0.35 | 0.49 | 0.014 | 0.019 |
| F | 0.40 | 1.25 | 0.016 | 0.049 |
| G | 1.27 BSC | | 0.050 BSC | |
| J | 0.19 | 0.25 | 0.008 | 0.009 |
| K | 0.10 | 0.25 | 0.004 | 0.009 |
| M | 0 ^o | 7 ^o | 0 ^o | 7 ^o |
| P | 5.80 | 6.20 | 0.228 | 0.244 |
| R | 0.25 | 0.50 | 0.010 | 0.019 |

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