

Noninverting 3-State Buffer

NLV74VHC1G126, NLV74VHC1GT126

The NLV74VHC1G126 / NLV74VHC1GT126 is a single gate noninverting 3-state buffer in tiny footprint packages. The NLV74VHC1G126 has CMOS-level input thresholds while the NLV74VHC1GT126 has TTL-level input thresholds.

The internal circuit is composed of three stages, including a buffered 3–state output which provides high noise immunity and stable output.

The input structures provide protection when voltages up to 5.5 V are applied, regardless of the supply voltage. This allows the device to be used to interface 5 V circuits to 3 V circuits. Some output structures also provide protection when V_{CC} = 0 V and when the output voltage exceeds V_{CC} . These input and output structures help prevent device destruction caused by supply voltage – input/output voltage mismatch, battery backup, hot insertion, etc.

Features

- Designed for 2.0 V to 5.5 V V_{CC} Operation
- 3.5 ns t_{PD} at 5 V (typ)
- Inputs/Outputs Over-Voltage Tolerant up to 5.5 V
- I_{OFF} Supports Partial Power Down Protection
- Source/Sink 8 mA at 3.0 V
- Available in SC-88A, TSOP-5 and SOT-953 Packages
- Chip Complexity < 100 FETs
- NLV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant



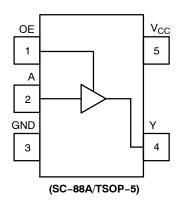
Figure 1. Logic Symbol

SC-88A DF SUFFIX CASE 419A TSOP-5 DT SUFFIX CASE 483 SOT-953 P5 SUFFIX CASE 527AE XX M= X

ORDERING INFORMATION

(Note: Microdot may be in either location)

See detailed ordering, marking and shipping information in the package dimensions section on page 8 of this data sheet.



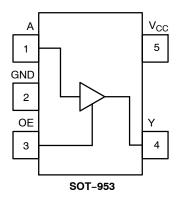


Figure 2. Pinout (Top View)

PIN ASSIGNMENT (SC-88A/TSOP-5)

Pin	Function
1	OE
2	А
3	GND
4	Y
5	V _{CC}

PIN ASSIGNMENT (SOT-953)

Pin	Function		Pin	Function	Input	7
1	OE		1	A	OE A	
2	А		2	GND	H L	
3	GND		3	OE	<i>Н</i>	
4	Y		4	Y	V Lai X	
5	V _{CC}		5	V _{CC}	X = Don't Care	
THIS	DEVICE PI	N E P P P	OF RECONS	MIENOUR ACTORIN	H H L X X = Don't Care	

FUNCTION TABLE

Inp	out S	Output
OE	A	Υ
H	_	L
Ħ	Н	Н
L	×	Z

MAXIMUM RATINGS

Symbol	C	haracteristics	Value	Unit
V _{CC}	DC Supply Voltage		-0.5 to +7.0	V
V _{IN}	DC Input Voltage		-0.5 to +7.0	V
V _{OUT}	DC Output Voltage	1Gxx	-0.5 to V _{CC} + 0.5	V
		1GTxx Active–Mode (High or Low State) Tri–State Mode (Note 1) Power–Down Mode (V _{CC} = 0 V)	-0.5 to V _{CC} + 0.5 -0.5 to +7.0 -0.5 to +7.0	
I _{IK}	DC Input Diode Current	V _{IN} < GND	-20	mA
I _{OK}	DC Output Diode Current	1Gxx V _{OUT} > V _{CC} , V _{OUT} < GND	±20	mA
		1GTxx V _{OUT} < GND	-20	
I _{OUT}	DC Output Source/Sink Current	±25	mA	
I _{CC} or I _{GND}	DC Supply Current per Supply Pir	or Ground Pin	±50	mA
T _{STG}	Storage Temperature Range		-65 to +150	7 .c
TL	Lead Temperature, 1 mm from Ca	se for 10 secs	260	°C
TJ	Junction Temperature Under Bias		+150	°C
θJA	Thermal Resistance (Note 2)	SC-88A TSOP-5 SOT-953	377 320 254	°C/W
P _D	Power Dissipation in Still Air	SC-88A TSOP-5 SOT-953	332 390 491	mW
MSL	Moisture Sensitivity	10,00	Level 1	-
F _R	Flammability Rating	Oxygen Index: 28 to 34	UL 94 V-0 @ 0.125 in	-
V _{ESD}	ESD Withstand Voltage (Note 3)	Human Body Model Charged Device Model	2000 1000	V
I _{Latchup}	Latchup Performance (Note 4)	OF TROOP	±100	mA

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

Applicable to devices with outputs that may be tri-stated.
 Measured with minimum pad spacing on an FR4 board, using 10mm-by-1inch, 2 ounce copper trace no air flow per JESD51-7.
 HBM tested to ANSI/ESDA/JEDEC JS-001-2017. CDM tested to EIA/JESD22-C101-F. JEDEC recommends that ESD qualification to EIA/JESD22-A115-A (Machine Model) be discontinued per JEDEC/JEP172A.
 Tested to EIA/JESD78 Class III.

THIS DEV

RECOMMENDED OPERATING CONDITIONS

Symbol	С	haracteristics	Min	Max	Unit
V _{CC}	Positive DC Supply Voltage	2.0	5.5	V	
V _{IN}	DC Input Voltage	0	5.5	V	
V _{OUT}	DC Output Voltage	1Gxx	0	V _{CC}	V
		1GTxx Active–Mode (High or Low State) Tri–State Mode (Note 1) Power–Down Mode (V _{CC} = 0 V)	0 0 0	V _{CC} 5.5 5.5	
T _A	Operating Temperature Range		-55	+125	°C
t _r , t _f	Input Rise and Fall Time	V _{CC} = 3.0 V to 3.6 V V _{CC} = 4.5 V to 5.5 V	0 0	100 20	ns/V

Functional operation above the stresses listed in the Recommended Operating Ranges is not implied. Extended exposure to stresses beyond the Recommended Operating Ranges limits may affect device reliability.

DC ELECTRICAL CHARACTERISTICS (NLV74VHC1G126)

		Test	V _{CC}	1	A = 25°	С	-40°C ≤ 1	A ≤ 85°C	-55°C ≤ T	_A ≤ 125°C	
Symbol	Parameter	Conditions	(V)	Min	Тур	Max	Min	Max	Min	Max	Unit
V _{IH}	High-Level Input		2.0	1.5	-	-	1.5	-	1.5	-	V
	Voltage		3.0	2.1	-	-	2.1		2.1	1	
			4.5	3.15	-	1	3.15	N	3.15	ı	
			5.5	3.85	ľ	7	3.85	2	3.85	1	
V_{IL}	Low-Level Input		2.0	-		0.5		0.5	N	0.5	V
	Voltage		3.0	4	1	0.9	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0.9		0.9	
			4.5	-		1,35	0	1.35	_	1.35	
			5.5	P	1/10	1.65	<i>///-</i> /C	1.65	_	1.65	
V _{OH}	High-Level Output Voltage	$\begin{split} V_{IN} &= V_{IH} \text{ or } V_{IL} \\ I_{OH} &= -50 \mu\text{A} \\ I_{OH} &= -50 \mu\text{A} \\ I_{OH} &= -50 \mu\text{A} \\ I_{OH} &= -4 m\text{A} \\ I_{OH} &= -8 m\text{A} \end{split}$	2.0 3.0 4.5 3.0 4.5	1.9 2.9 4.4 2.58 3.94	2.0 3.0 4.5 -	7-P	1.9 2.9 4.4 2.48 3.80	 - - -	1.9 2.9 4.4 2.34 3.66		V
V _{OL}	Low-Level Output Voltage	$\begin{aligned} V_{IN} &= V_{IH} \text{ or } V_{IL} \\ I_{OL} &= 50 \mu\text{A} \\ I_{OL} &= 50 \mu\text{A} \\ I_{OL} &= 50 \mu\text{A} \\ I_{OL} &= 4 m\text{A} \\ I_{OL} &= 8 m\text{A} \end{aligned}$	2.0 3.0 4.5 3.0 4.5	P	0.0 0.0 0.0 - -	0.1 0.1 0.1 0.36 0.36	1111	0.1 0.1 0.1 0.44 0.44	1111	0.1 0.1 0.1 0.52 0.52	>
I _{IN}	Input Leakage Current	V _{IN} ≤ 5.5 V or GND	2.0 to 5.5	-	-	±0.1	-	±1.0	-	±1.0	μΑ
l _{OZ}	3-State Output Leakage Current	V _{OUT} = 0 V to 5.5 V	5.5	_	-	±0.25	-	±2.5	-	±2.5	μΑ
l _{OFF}	Power Off Leakage Current	V _{IN} = 5.5 V	0.0	_	-	1.0	-	10	-	10	μΑ
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND	5.5	-	-	1.0	-	20	-	40	μΑ

DC ELECTRICAL CHARACTERISTICS (NLV74VHC1GT126)

		Test	V _{CC}	1	Γ _A = 25°	С	-40°C ≤ 1	Γ _A ≤ 85°C	-55°C ≤ T	A ≤ 125°C	
Symbol	Parameter	Conditions	(V)	Min	Тур	Max	Min	Max	Min	Max	Unit
V _{IH}	High-Level Input		2.0	1.0	-	-	1.0	_	1.0	-	V
	Voltage		3.0	1.4	_	-	1.4	-	1.4	-	
			4.5	2.0	-	-	2.0	-	2.0	-	
			5.5	2.0	_	_	2.0	-	2.0	-	
V _{IL}	Low-Level Input		2.0	_	_	0.28	-	0.28	_	0.28	V
	Voltage		3.0	-	-	0.45	_	0.45	_	0.45	
			4.5	-	_	0.8	-	0.8	_	0.8	
			5.5	-	-	0.8	_	0.8	_	0.8	
V _{OH}	High-Level Output Voltage	$\begin{aligned} &V_{IN} = V_{IH} \text{ or } V_{IL} \\ &I_{OH} = -50 \mu\text{A} \\ &I_{OH} = -50 \mu\text{A} \\ &I_{OH} = -50 \mu\text{A} \\ &I_{OH} = -4 m\text{A} \\ &I_{OH} = -8 m\text{A} \end{aligned}$	2.0 3.0 4.5 3.0 4.5	1.9 2.9 4.4 2.58 3.94	2.0 3.0 4.5 –		1.9 2.9 4.4 2.48 3.80	-	1.9 2.9 4.4 2.34 3.66	iGN	V
V _{OL}	Low-Level Output Voltage	$\begin{array}{c} V_{IN} = V_{IH} \text{ or } V_{IL} \\ I_{OL} = 50 \mu\text{A} \\ I_{OL} = 50 \mu\text{A} \\ I_{OL} = 50 \mu\text{A} \\ I_{OL} = 4 \text{ mA} \\ I_{OL} = 8 \text{ mA} \end{array}$	2.0 3.0 4.5 3.0 4.5	- - - -	0.0 0.0 0.0 -	0.1 0.1 0.1 0.36 0.36	-	0.1 0.1 0.1 0.44 0.44	NOE - -	0.1 0.1 0.1 0.52 0.52	V
I _{IN}	Input Leakage Cur- rent	V _{IN} = 5.5 V or GND	2.0 to 5.5		-	±0.1	O.F.	±1.0	104	±1.0	μΑ
I _{OZ}	3-State Output Leakage Current	V _{OUT} = 0 V to 5.5 V	5.5	1		±0.25	IR O	± 2.5	_	±2.5	μΑ
I _{OFF}	Power Off Leakage Current	V _{IN} = 5.5 V or V _{OUT} = 5.5 V	0		W	110	MFC	10	-	10	μΑ
I _{CC}	Quiescent Supply Current	V _{IN} = V _{CC} or GND	5,5) <u>-</u> (bo.	1.0	_	20	-	40	μΑ
I _{CCT}	Increase in Quies- cent Supply Current per Input Pin	One Input: V _{IN} = 3.4 V; Other Input at V _{CC} or GND	5.5	(VI)	NE	1.35	-	1.5	-	1.65	mA
<i>A</i>	HISDEVIC	REPRE	SER								

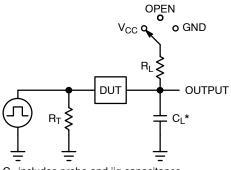
AC ELECTRICAL CHARACTERISTICS

				Т	A = 25°	С	-40°C ≤ 7	Γ _A ≤ 85°C	-55°C ≤ T	A ≤ 125°C	
Symbol	Parameter	Conditions	V _{CC} (V)	Min	Тур	Max	Min	Max	Min	Max	Unit
t _{PLH} ,	t _{PLH} , Propagation Delay, t _{PHL} A to Y (Figures 3 and 4)	C _L = 15 pF	3.0 to 3.6	_	4.5	8.0	-	9.5	_	12.0	ns
t _{PHL}		C _L = 50 pF		_	6.4	11.5	-	13.0	-	16.0	
		C _L = 15 pF	4.5 to 5.5	-	3.5	5.5	-	6.5	-	8.5	
		C _L = 50 pF		_	4.5	7.5	-	8.5	_	10.5	
t _{PZL} ,	Output Enable	C _L = 15 pF	3.0 to 3.6	-	4.5	8.0	-	9.5	-	11.5	ns
^t PZH	t _{PZH} Time, OE to Y (Figures 3 and 4)	C _L = 50 pF		_	6.4	11.5	-	13.0	-	15.0	
		C _L = 15 pF	4.5 to 5.5	_	3.5	5.1	-	6.0	_	8.5	
		C _L = 50 pF		-	4.5	7.1	-	8.0	-	10.5	
t _{PLZ} ,	Output Disable	C _L = 15 pF	3.0 to 3.6	_	6.5	9.7	-	11.5	_	14.5	ns
t _{PHZ}	Time, OE to Y (Figures 3 and 4)	C _L = 50 pF		_	8.0	13.2	_	15.0	_	18.0	
		C _L = 15 pF	4.5 to 5.5	-	4.8	6.8	-	8.0	-	10.0	
		C _L = 50 pF		_	7.0	8.8	-	10.0	- (12.0	
C _{IN}	Input Capacitance			_	4.0	10	-	10	-	10	pF
C _{OUT}	Output Capacitance	Output in High Impedance State		_	6.0			ONE	N.	-	pF

			7 Fr	Typical	l @ 25°C, V _{CC} = 5.0 V	
C_{PD}	Power Dissipation Capacitance (Note 5)		N -	19 1	8.0	pF

Eq. Power Dissipation Capacitance (Note 5)

5. CpD is defined as the value of the internal equivalent capacitance which is calculated from the operating current consumption without load. Average operating current can be obtained by the equation: Icc(OPR) = CpD • Vcc • fin + Icc. CpD is used to determine the no-load dynamic power consumption; PD = CpD • Vcc² • fin + Icc • Vcc.



Test	Switch Position	C _L , pF	R_L, Ω
t _{PLH} / t _{PHL}	Open	See AC Characteristics Table	Х
t _{PLZ} / t _{PZL}	V _{CC}		1 k
t _{PHZ} / t _{PZH}	GND		1 k

X = Don't Care

 C_L includes probe and jig capacitance R_T is Z_{OUT} of pulse generator (typically 50 $\Omega)$ f = 1 MHz

Figure 3. Test Circuit

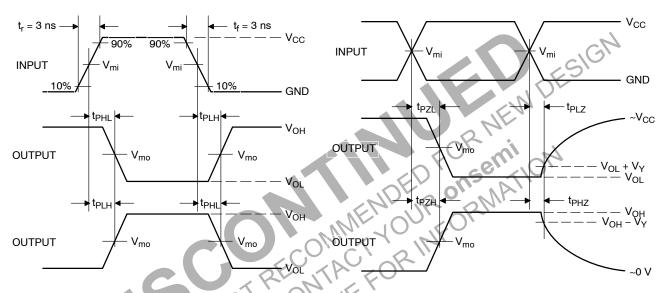


Figure 4. Switching Waveforms

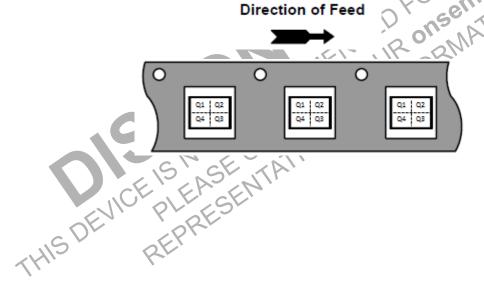
	110 -1 E GF	V _{mo}		
V _{CC} , V	V _{mi} , v	t _{PLH} , t _{PHL}	t_{PZL} , t_{PLZ} , t_{PZH} , t_{PHZ}	V _Y , V
3.0 to 3.6	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3
4.5 to 5.5	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.3

ORDERING INFORMATION

Device	Packages	Specific Device Code	Pin 1 Orientation (See below)	Shipping [†]
M74VHC1G126DFT2G-L22038	SC-88A	W2	Q4	3000 / Tape & Reel
NLVVHC1G126DFT1G*	SC-88A	W2	Q2	3000 / Tape & Reel
NLVVHC1G126DFT2G*	SC-88A	W2	Q4	3000 / Tape & Reel
M74VHC1GT126DF1G-L22038	SC-88A	W3	Q2	3000 / Tape & Reel
NLVVHC1GT126DF2G*	SC-88A	W3	Q4	3000 / Tape & Reel
NLVVHC1GT126DF1G*	SC-88A	W3	Q2	3000 / Tape & Reel
M74VHC1G126DTT1G	TSOP-5	W2	Q4	3000 / Tape & Reel
M74VHC1GT126DT1G	TSOP-5	W3	Q4	3000 / Tape & Reel
NLVVHC1GT126DT1G*	TSOP-5	W3R	Q4	3000 / Tape & Reel
MC74VHC1G126P5T5G-L22088	SOT-953	J	Q2	8000 / Tape & Reel
MC74VHC1GT126P5T5G-L22088	SOT-953	R	Q2	8000 / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

Pin 1 Orientation in Tape and Reel



^{*}NLV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable.





SC-88A (SC-70-5/SOT-353) CASE 419A-02 ISSUE M

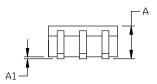
DATE 11 APR 2023

NOTES:

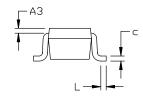
- 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
- 2. CONTROLLING DIMENSION: MILLIMETERS
- 3. 419A-01 DBSOLETE, NEW STANDARD 419A-02
- 4. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH,
 PROTRUSIONS, OR GATE BURRS.MOLD FLASH, PROTRUSIONS,
 OR GATE BURRS SHALL NOT EXCEED 0.1016MM PER SIDE.

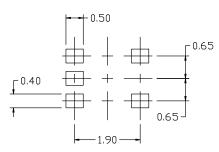
DIM	MILLIMETERS			
DIM	MIN.	N□M.	MAX.	
А	0.80	0.95	1.10	
A1			0.10	
A3	0.20 REF			
b	0.10	0.20	0.30	
C	0.10		0.25	
D	1.80	2.00	2,20	
Е	2.00	2.10	2.20	
E1	1.15	1.25	1.35	
е	0.65 BSC			
L	0.10	0.15	0.30	

E + E1



→ 0.2 M B M





RECOMMENDED MOUNTING FOOTPRINT

For additional information on our Pb-Free strategy and soldering details, please download the DN Semiconductor Soldering and Mounting Techniques Reference Manual, SDLDERRM/D.

GENERIC MARKING DIAGRAM*



*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "•", may or may not be present. Some products may not follow the Generic Marking.

XXX = Specific Device Code

M = Date Code

= Pb-Free Package

(Note: Microdot may be in either location)

STYLE 1:
PIN 1. BASE
EMITTER
3. BASE
COLLECTOR
COLLECTOR

YLE 2	2:
IN 1.	ANODE
2.	EMITTER
3.	BASE
4.	COLLECTOR
5.	CATHODE

STYLE 3: PIN 1. ANODE 1 2. N/C 3. ANODE 2 4. CATHODE 2 5. CATHODE 1 STYLE 4: PIN 1. SOURCE 1 2. DRAIN 1/2 3. SOURCE 1 4. GATE 1 5. GATE 2

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

STYLE 6: PIN 1. EMITTER 2 2. BASE 2 3. EMITTER 1 4. COLLECTOR STYLE 7:
PIN 1. BASE
2. EMITTER
3. BASE
4. COLLECTOR
5. COLLECTOR

STYLE 8: PIN 1. CATHODE 2. COLLECTOR 3. N/C 4. BASE

5. EMITTER

STYLE 9: PIN 1. ANODE 2. CATHODE 3. ANODE 4. ANODE 5. ANODE Note: Please refer to datasheet for style callout. If style type is not called out in the datasheet refer to the device datasheet pinout or pin assignment.

DOCUMENT NUMBER:

98ASB42984B

Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.

DESCRIPTION:

5. COLLECTOR 2/BASE 1

SC-88A (SC-70-5/SOT-353)

PAGE 1 OF 1

onsemi and ONSEMI are trademarks of Semiconductor Components Industries, LLC dba onsemi or its subsidiaries in the United States and/or other countries. onsemi reserves the right to make changes without further notice to any products herein. onsemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. onsemi does not convey any license under its patent rights nor the rights of others.

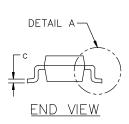


TSOP-5 3.00x1.50x0.95, 0.95P **CASE 483 ISSUE P**

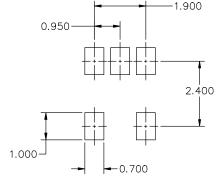
DATE 01 APR 2024

NOTES:

- DIMENSIONING AND TOLERANCING CONFORM TO ASME 1. Y14.5-2018.
- ALL DIMENSION ARE IN MILLIMETERS (ANGLES IN DEGREES). MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
- DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OF GATE BURRS. MOLD FLASH, PROTRUSIONS, OR GATE BURRS SHALL NOT EXCEED 0.15 PER SIDE. DIMENSION D.
- OPTIONAL CONSTRUCTION: AN ADDITIONAL TRIMMED LEAD IS ALLOWED IN THIS LOCATION. TRIMMED LEAD NOT TO EXTEND MORE THAN 0.2 FROM BODY.



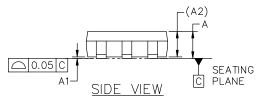
DIM	MILLIMETERS			
ואויט ן	MIN.	NOM.	MAX.	
А	0.900	1.000	1.100	
A1	0.010	0.055	0.100	
A2	0.950 REF.			
b	0.250	0.375	0.500	
С	0.100	0.180	0.260	
D	2.850	3.000	3.150	
Е	2.500	2.750	3.000	
E1	1.350	1.500	1.650	
е	0.950 BSC			
L	0.200	0.400	0.600	
Θ	0.	5°	10°	

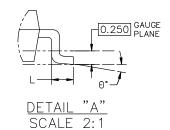


RECOMMENDED MOUNTING FOOTPRINT*

FOR ADDITIONAL INFORMATION ON OUR Pb-FREE STRATEGY AND SOLDERING DETAILS, PLEASE DOWNLOAD THE ON SEMICONDUCTOR SOLDERING AND MOUNTING TECHNIQUES REFERENCE MANUAL, SOLDERRM/D.

NOTE 5 В Ė1 PIN 1 **IDENTIFIER** A TOP VIEW





GENERIC MARKING DIAGRAM*





Discrete/Logic

= Pb-Free Package

Analog

XXX = Specific Device Code XXX = Specific Device Code M = Date Code

= Assembly Location = Year

W = Work Week = Pb-Free Package

(Note: Microdot may be in either location)

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "■", may

or may not be present. Some products may not follow the Generic Marking.

Electronic versions are uncontrolled except when accessed directly from the Document Repository. **DOCUMENT NUMBER:** 98ARB18753C Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red. **DESCRIPTION:** TSOP-5 3.00x1.50x0.95, 0.95P **PAGE 1 OF 1**

onsemi and ONSEMI are trademarks of Semiconductor Components Industries, LLC dba onsemi or its subsidiaries in the United States and/or other countries. onsemi reserves the right to make changes without further notice to any products herein. onsemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. onsemi does not convey any license under its patent rights nor the rights of others.



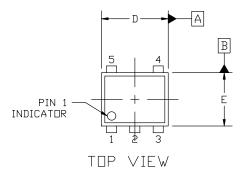


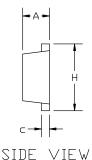
SOT-953 1.00x0.80x0.37, 0.35P CASE 527AE **ISSUE F**

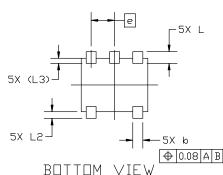
DATE 17 JAN 2024

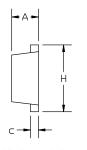
NOTES:

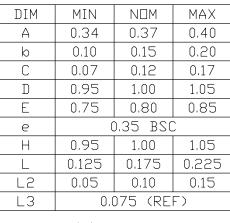
- DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
- CONTROLLING DIMENSION: MILLIMETERS.
- MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF THE BASE MATERIAL.
- 4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS.



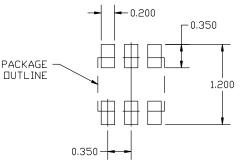








MILLIMFTERS



RECOMMENDED MOUNTING FOOTPRINT

*For additional information on our Pb-Free strategy and soldering details, please download the DN Semiconductor Soldering and Mounting Techniques Reference Manual, SDLDERRM/D.

GENERIC MARKING DIAGRAM*



= Specific Device Code

= Month Code

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "■", may or may not be present. Some products may not follow the Generic Marking.

DOCUMENT NUMBER:	98AON26457D	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.	
DESCRIPTION:	SOT-953 1.00x0.80x0.37, 0.35P		PAGE 1 OF 9

onsemi and ONSEMI are trademarks of Semiconductor Components Industries, LLC dba onsemi or its subsidiaries in the United States and/or other countries. onsemi reserves the right to make changes without further notice to any products herein. onsemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. onsemi does not convey any license under its patent rights nor the rights of others.

onsemi, ONSEMI., and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "onsemi" or its affiliates and/or subsidiaries in the United States and/or other countries. onsemi owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of onsemi's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. onsemi reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and onsemi makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using **onsemi** products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by **onsemi**. "Typical" parameters which may be provided in **onsemi** data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. **onsemi** does not convey any license under any of its intellectual property rights nor the rights of others. **onsemi** products are not designed, intended, or authorized for use as a critical component in life support systems. or any FDA Class 3 medical devices or medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase or use **onsemi** products for any such unintended or unauthorized application, Buyer shall indemnify and hold **onsemi** and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that **onsemi** was negligent regarding the design or manufacture of the part. **onsemi** is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.

ADDITIONAL INFORMATION

TECHNICAL PUBLICATIONS:

 $\textbf{Technical Library:} \ \underline{www.onsemi.com/design/resources/technical-documentation}$

onsemi Website: www.onsemi.com

ONLINE SUPPORT: www.onsemi.com/support

For additional information, please contact your local Sales Representative at

www.onsemi.com/support/sales

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

onsemi:

<u>M74VHC1G126DTT1G</u> <u>M74VHC1GT126DT1G</u> <u>NLVVHC1GT126DF2G</u> <u>NLVVHC1GT126DF1G</u>

<u>NLVVHC1G126DFT1G</u> <u>NLVVHC1GT126DT1G</u> <u>NLVVHC1G126DFT2G</u> <u>M74VHC1GT126DF1G-L22038</u>

MC74VHC1GT126P5T5G-L22088 MC74VHC1G126P5T5G-L22088 M74VHC1G126DFT2G-L22038