Schmitt Trigger Buffer, Dual, Non-Inverting

NL27WZ17

The NL27WZ17 is a high performance dual buffer with Schmitt-Trigger inputs operating from a 1.65 to 5.5 V supply.

Features

- Designed for 1.65 V to 5.5 V V_{CC} Operation
- 3.7 ns t_{PD} at $V_{CC} = 5 \text{ V (Typ)}$
- Inputs/Outputs Overvoltage Tolerant up to 5.5 V
- I_{OFF} Supports Partial Power Down Protection
- Sink 32 mA at 4.5 V
- Available in SC-88, SC-74, and UDFN6 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

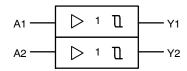
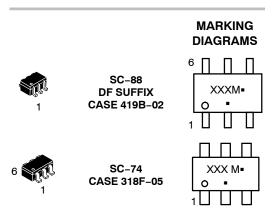


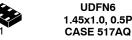
Figure 1. Logic Symbol



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UDFN6 1x1, 0.35P CASE 517BX



X, XXX = Specific Device Code

M = Date Code*

■ Pb-Free Package

(Note: Microdot may be in either location)
*Date Code orientation and/or position may vary

Date Code orientation and/or position may vary depending upon manufacturing location.

ORDERING INFORMATION

See detailed ordering and shipping information in the package dimensions section on page 7 of this data sheet.

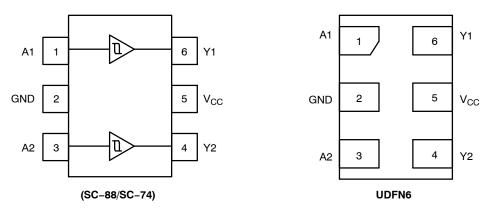


Figure 2. Pinout (Top View)

PIN ASSIGNMENT

Pin	Function
1	A1
2	GND
3	A2
4	Y2
5	V _{CC}
6	Y1

FUNCTION TABLE

A Input	Y Output
L	L
Н	Н

MAXIMUM RATINGS

Symbol	Characteristics	3	Value	Units
V _{CC}	DC Supply Voltage	SC-88 (NLV) SC-88, SC-74, UDFN6	-0.5 to +7.0 -0.5 to +6.5	V
V _{IN}	DC Input Voltage	SC-88 (NLV) SC-88, SC-74, UDFN6	-0.5 to +7.0 -0.5 to +6.5	V
V _{OUT}	DC Output Voltage SC-88 (NLV)	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	V
	DC Output Voltage SC-88, SC-74, UDFN6	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 +6.5 -0.5 to +6.5	V
I _{IK}	DC Input Diode Current, V _{IN} < GND		-50	mA
l _{ok}	DC Output Diode Current, V _{OUT} < GND		-50	mA
l _{out}	DC Output Source/Sink Current		±50	mA
I _{CC} or I _{GND}	DC Supply Current per Supply Pin or Ground Pin		±100	mA
T _{STG}	Storage Temperature Range		-65 to +150	°C
T _L	Lead Temperature, 1 mm from Case for 10 secs		260	°C
TJ	Junction Temperature under Bias		+150	°C
$\theta_{\sf JA}$	Thermal Resistance (Note 2)	SC-88 SC-74 UDFN6	377 320 154	°C/W
P _D	Power Dissipation in Still Air	SC-88 SC-74 UDFN6	332 390 812	mW
MSL	Moisture Sensitivity		Level 1	-
F _R	Flamebility 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 (NLV) Charged Device Model	2000 1000 N/A	V
I _{LATCHUP}	Latchup Performance (Note 4)	(NLV)	±100 ±500	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.

- 1. Applicable to devices with outputs that may be tri-stated.
- Measured with minimum pad spacing on an FR4 board, using 10 mm-by-1 inch, 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.
- 4. Tested to EIA/JESD78 Class II.

RECOMMENDED OPERATING CONDITIONS

Symbol	Para	Min	Max	Unit	
V _{CC}	Positive DC Supply Voltage	1.65	5.5	V	
V _{IN}	DC Input Voltage		0	5.5	V
V _{OUT}	DC Output Voltage	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	٧
T _A	Operating Temperature Range		-55	+125	°C
t _r , t _f	Input Transition Rise or Fall Rate	$\begin{array}{c} V_{CC} = 1.65 \ V \ to \ 1.95 \ V \\ V_{CC} = 2.3 \ V \ to \ 2.7 \ V \\ V_{CC} = 3.0 \ V \ to \ 3.6 \ V \\ V_{CC} = 4.5 \ V \ to \ 5.5 \ V \end{array}$	0 0 0 0	No Limit No Limit No Limit No Limit	ns

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

				T _A	= 25°C		-40°C ≤ T _A	≤ 85°C	-55°C ≤ T _A ≤	≤ 125°C	
Symbol	Parameter	Condition	V _{CC} (V)	Min	Тур	Max	Min	Max	Min	Max	Unit
V _T +	V _T + Positive Input Threshold Voltage		1.65	-	1.0	1.4	-	1.4	-	1.4	V
			2.3	-	1.5	1.8	-	1.8	-	1.8	
	l vellage		2.7	-	1.7	2	-	2	-	2	
			3	-	1.9	2.2	-	2.2	-	2.2	
			4.5	-	2.7	3.1	-	3.1	-	3.1	
			5.5	-	3.3	3.6	-	3.6	-	3.6	
V _T -	Negative		1.65	0.2	0.5	-	0.2	-	0.2	-	٧
	Input Threshold		2.3	0.4	0.75	-	0.4	-	0.4	-	
	Voltage		2.7	0.5	0.87	-	0.5	-	0.5	-	
			3	0.6	1.0	-	0.6	-	0.6	-	
			4.5	1.0	1.5	-	1.0	-	1.0	-	
			5.5	1.2	1.9	-	1.2	-	1.2	-	
V _H	Input		1.65	0.1	0.48	0.9	0.1	0.9	0.1	0.9	V
	Hysteresis Voltage		2.3	0.25	0.75	1.1	0.25	1.1	0.25	1.1	
	Vollago		2.7	0.3	0.83	1.15	0.3	1.15	0.3	1.15	
			3	0.4	0.93	1.2	0.4	1.2	0.4	1.2	
			4.5	0.6	1.2	1.5	0.6	1.5	0.6	1.5	
			5.5	0.7	1.4	1.7	0.7	1.7	0.7	1.7	
V _{OH}	High-Level	$I_{OH} = -100 \mu A$	1.65 to 5.5	V _{CC} – 0.1	V_{CC}	-	V _{CC} – 0.1	-	V _{CC} – 0.1	-	V
	Output Voltage	I _{OH} = -4 mA	1.65	1.29	1.52	-	1.29	-	1.29	-	
	$V_{IN} = V_{IH}$ or	$I_{OH} = -8 \text{ mA}$	2.3	1.9	2.1	-	1.9	-	1.9	-	
	V _{IL}	I _{OH} = -12 mA	2.7	2.2	2.4	-	2.2	-	2.2	-	
		I _{OH} = -16 mA	3	2.4	2.7	-	2.4	-	2.4	-	
		I _{OH} = -24 mA	3	2.3	2.5	-	2.3	-	2.3	-	
		I _{OH} = -32 mA	4.5	3.8	4	-	3.8	-	3.8	-	
V _{OL}	Low-Level	I _{OL} = 100 μA	1.65 to 5.5	-	_	0.1	-	0.1	-	0.1	V
	Output Voltage	I _{OL} = 4 mA	1.65	-	0.08	0.24	-	0.24	-	0.24	
	$V_{IN} = V_{IH}$ or	I _{OL} = 8 mA	2.3	-	0.2	0.3	-	0.3	-	0.3	
	V _{IL}	I _{OL} = 12 mA	2.7	-	0.22	0.4	-	0.4	-	0.4	
		I _{OL} = 16 mA	3	-	0.28	0.4	-	0.4	-	0.4	
		I _{OL} = 24 mA	3	-	0.38	0.55	-	0.55	-	0.55	
		I _{OL} = 32 mA	4.5	-	0.42	0.55	-	0.55	_	0.55	
I _{IN}	Input Leakage Current	V _{IN} = 5.5 V or GND	1.65 to 5.5	-	-	±0.1	-	±1.0	-	±1.0	μΑ
I _{OFF}	Power Off Leakage Current	V _{IN} = 5.5 V or V _{OUT} = 5.5 V	0	-	-	1	-	10	-	10	μΑ
Icc	Quiescent Supply Current	V _{IN} = 5.5 V or GND	5.5	-	-	1	-	10	-	10	μΑ

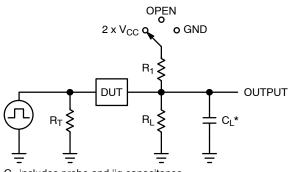
AC ELECTRICAL CHARACTERISTICS

				1	T _A = 25°C	•	-40°C ≤ 1	T _A ≤ 85°C	-55°C ≤ T	_A ≤ 125°C	
Symbol	Parameter	Condition	V _{CC} (V)	Min	Тур	Max	Min	Max	Min	Max	Unit
tPHL D	Propagation Delay, A to Y (Figures 3 and 4)	$RL = 1 M\Omega$, CL = 15 pF	1.65 to 1.95	-	9.1	15	-	15.6	-	15.6	ns
	(i igules 3 and 4)	$'$ RL = 1 M Ω ,	2.3 to 2.7	-	5.0	9.0	-	9.5	-	9.5	
	GL = 15 β	CL = 15 pF	3.0 to 3.6	-	3.7	6.3	-	6.5	-	6.5	
			4.5 to 5.5	-	3.1	5.2	-	5.5	-	5.5	
		,	3.0 to 3.6	-	4.4	7.2	-	7.5	-	7.5	
		CL = 50 pF	4.5 to 5.5	-	3.7	5.9	_	6.2	_	6.2	

CAPACITIVE CHARACTERISTICS

Symbol	Parameter	Condition	Typical	Unit
C _{IN}	Input Capacitance	$V_{CC} = 5.5 \text{ V}, V_{I} = 0 \text{ V or } V_{CC}$	2.5	pF
C _{OUT}	Output Capacitance	$V_{CC} = 5.5 \text{ V}, V_{I} = 0 \text{ V or } V_{CC}$	4.0	pF
C _{PD}	Power Dissipation Capacitance (Note 5)	10 MHz, V_{CC} = 3.3 V, V_{IN} = 0 V or V_{CC} 10 MHz, V_{CC} = 5.0 V, V_{IN} = 0 V or V_{CC}	11 12.5	pF

^{5.} C_{PD} 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: $I_{CC(OPR)} = C_{PD} \cdot V_{CC} \cdot f_{in}$) I_{CC} . C_{PD} is used to determine the no–load dynamic power consumption; $P_D = C_{PD} \cdot V_{CC}^2 \cdot f_{in}$) $I_{CC} \cdot V_{CC}$.



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

 $\begin{array}{|c|c|c|c|c|} \hline \textbf{Test} & \textbf{Switch} & \textbf{C_L, pF} & \textbf{R_L, } \Omega & \textbf{R_1, } \Omega \\ \hline t_{PLH} / t_{PHL} & \text{Open} & \text{See AC Characteristics Table} \\ \hline t_{PLZ} / t_{PZL} & 2 \times V_{CC} & - & - & - \\ \hline & & \text{See AC Characteristics Table} \\ \hline t_{PHZ} / t_{PZH} & \text{GND} & - & - & - \\ \hline & & \text{See AC Characteristics Table} \\ \hline \end{array}$

X = Don't Care

Figure 3. Test Circuit

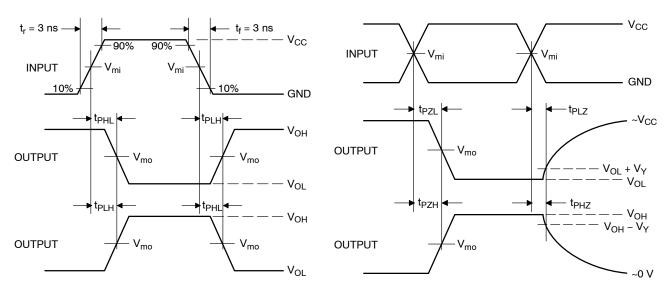


Figure 4. Switching Waveforms

		V _m		
V _{CC} , V	V _{mi} , V	t _{PLH} , t _{PHL}	t _{PZL} , t _{PLZ} , t _{PZH} , t _{PHZ}	V _Y , V
1.65 to 1.95	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.15
2.3 to 2.7	V _{CC} /2	V _{CC} /2	V _{CC} /2	0.15
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

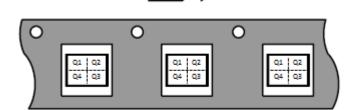
ORDERING INFORMATION

Device	Package	Specific Device Code	Pin1 Orientation (See below)	Shipping [†]
NL27WZ17DFT2G	SC-88	MX	Q4	3000 / Tape & Reel
NLV27WZ17DFT2G*	SC-88	MX	Q4	3000 / Tape & Reel
NL27WZ17DBVT1G	SC-74	AC	Q4	3000 / Tape & Reel
NL27WZ17MU1TCG	UDFN6 1.45 x 1.0, 0.5P	K (Rotated 90° CW)	Q4	3000 / Tape & Reel
NL27WZ17MU3TCG	UDFN6 1.0 x 1.0, 0.35P	D	Q4	3000 / 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

Direction of Feed



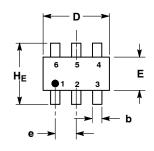
^{*}NLV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable.

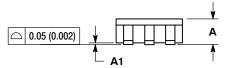


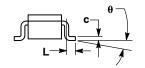
SC-74 CASE 318F-05 ISSUE N

DATE 08 JUN 2012

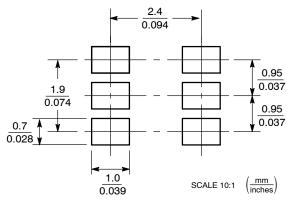








SOLDERING FOOTPRINT*



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

- 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH
- CONTROLLING DIMENSION: INCH.
 MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH
 THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL. 318F-01, -02, -03, -04 OBSOLETE. NEW STANDARD 318F-05.

	М	ILLIMETE	RS		INCHES	
DIM	MIN	NOM	MAX	MIN	NOM	MAX
Α	0.90	1.00	1.10	0.035	0.039	0.043
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.25	0.37	0.50	0.010	0.015	0.020
С	0.10	0.18	0.26	0.004	0.007	0.010
D	2.90	3.00	3.10	0.114	0.118	0.122
E	1.30	1.50	1.70	0.051	0.059	0.067
е	0.85	0.95	1.05	0.034	0.037	0.041
L	0.20	0.40	0.60	0.008	0.016	0.024
HE	2.50	2.75	3.00	0.099	0.108	0.118
θ	0°	_	10°	0°	_	10°

GENERIC MARKING DIAGRAM*



XXX = Specific Device Code

M = Date Code = 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.

STYLE 1: PIN 1. CATHODE 2. ANODE 3. CATHODE 4. CATHODE 5. ANODE 6. CATHODE	STYLE 2: PIN 1. NO CONNECTION 2. COLLECTOR 3. EMITTER 4. NO CONNECTION 5. COLLECTOR 6. BASE	STYLE 3: PIN 1. EMITTER 1 2. BASE 1 3. COLLECTOR 2 4. EMITTER 2 5. BASE 2 6. COLLECTOR 1	STYLE 4: PIN 1. COLLECTOR 2 2. EMITTER 1/EMITTER 2 3. COLLECTOR 1 4. EMITTER 3 5. BASE 1/BASE 2/COLLECTOR 3 6. BASE 3	STYLE 5: PIN 1. CHANNEL 1 2. ANODE 3. CHANNEL 2 4. CHANNEL 3 5. CATHODE 6. CHANNEL 4	STYLE 6: PIN 1. CATHODE 2. ANODE 3. CATHODE 4. CATHODE 5. CATHODE 6. CATHODE
STVI E 7:	CTVI E o	STVI E 0:	STVI F 10:	STVI F 11:	

4. CATHODE	4. NO CONNECTION	4. EMITTER 2	4. EMITTER 3	4. CHANNEL 3
5. ANODE	5. COLLECTOR	5. BASE 2	5. BASE 1/BASE 2/COLLECTOR 3	5. CATHODE
6. CATHODE	6. BASE	6. COLLECTOR 1	6. BASE 3	6. CHANNEL 4
STYLE 7: PIN 1. SOURCE 1 2. GATE 1 3. DRAIN 2 4. SOURCE 2 5. GATE 2 6. DRAIN 1	STYLE 8: PIN 1. EMITTER 1 2. BASE 2 3. COLLECTOR 2 4. EMITTER 2 5. BASE 1 6. COLLECTOR 1	STYLE 9: PIN 1. EMITTER 2 2. BASE 2 3. COLLECTOR 1 4. EMITTER 1 5. BASE 1 6. COLLECTOR 2	STYLE 10: PIN 1. ANODE/CATHODE 2. BASE 3. EMITTER 4. COLLECTOR 5. ANODE 6. CATHODE	STYLE 11: PIN 1. EMITTER 2. BASE 3. ANODE/CATHODE 4. ANODE 5. CATHODE 6. COLLECTOR

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DESCRIPTION:	SC-74		PAGE 1 OF 1

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DATE 11 DEC 2012





NOTES:

- DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
 CONTROLLING DIMENSION: MILLIMETERS
- CONTROLLING DIMENSION: MILLIMETERS.
 DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH,
- DIMENSIONS D AND E1 DO NOT INCLUDE MOLD FLASH, PROTRUSIONS, OR GATE BURRS. MOLD FLASH, PROTRUSIONS, OR GATE BURRS SHALL NOT EXCEED 0.20 PER END. DIMENSIONS D AND E1 AT THE OUTERMOST EXTREMES OF THE PLASTIC BODY AND DATUM H. DATUMS A AND B ARE DETERMINED AT DATUM H. DIMENSIONS b AND c APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.08 AND 0.15 FROM THE TIP.

- DIMENSION & DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.08 TOTAL IN EXCESS OF DIMENSION 6 AT MAXIMUM MATERIAL CONDITION. THE DAMBAR CANNOT BE LOCATED ON THE LOWER RADIUS OF THE FOOT.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
Α			1.10			0.043
A1	0.00		0.10	0.000		0.004
A2	0.70	0.90	1.00	0.027	0.035	0.039
b	0.15	0.20	0.25	0.006	0.008	0.010
С	0.08	0.15	0.22	0.003	0.006	0.009
D	1.80	2.00	2.20	0.070	0.078	0.086
E	2.00	2.10	2.20	0.078	0.082	0.086
E1	1.15	1.25	1.35	0.045	0.049	0.053
е		0.65 BS	С	0.026 BSC		
L	0.26	0.36	0.46	0.010	0.014	0.018
L2	0.15 BSC			0.006 BSC		
aaa	0.15			0.006		
bbb	0.30		0.012			
ccc	0.10			0.004		
ddd	0.10				0.004	

RECOMMENDED SOLDERING 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.

GENERIC MARKING DIAGRAM*



XXX = Specific Device Code

= Date Code* = Pb-Free Package

(Note: Microdot may be in either location)

- *Date Code orientation and/or position may vary depending upon manufacturing 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.

STYLES ON PAGE 2

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SC-88/SC70-6/SOT-363 CASE 419B-02 ISSUE Y

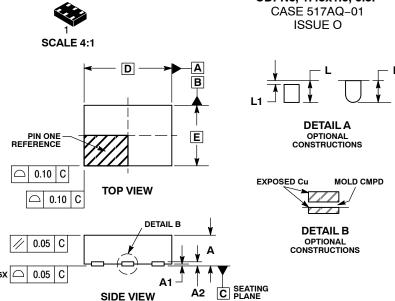
DATE 11 DEC 2012

STYLE 1: PIN 1. EMITTER 2 2. BASE 2 3. COLLECTOR 1 4. EMITTER 1 5. BASE 1 6. COLLECTOR 2	STYLE 2: CANCELLED	STYLE 3: CANCELLED	STYLE 4: PIN 1. CATHODE 2. CATHODE 3. COLLECTOR 4. EMITTER 5. BASE 6. ANODE	STYLE 5: PIN 1. ANODE 2. ANODE 3. COLLECTOR 4. EMITTER 5. BASE 6. CATHODE	STYLE 6: PIN 1. ANODE 2 2. N/C 3. CATHODE 1 4. ANODE 1 5. N/C 6. CATHODE 2
STYLE 7: PIN 1. SOURCE 2 2. DRAIN 2 3. GATE 1 4. SOURCE 1 5. DRAIN 1 6. GATE 2	STYLE 8: CANCELLED	STYLE 9: PIN 1. EMITTER 2 2. EMITTER 1 3. COLLECTOR 1 4. BASE 1 5. BASE 2 6. COLLECTOR 2	STYLE 10: PIN 1. SOURCE 2 2. SOURCE 1 3. GATE 1 4. DRAIN 1 5. DRAIN 2 6. GATE 2	STYLE 11: PIN 1. CATHODE 2 2. CATHODE 2 3. ANODE 1 4. CATHODE 1 5. CATHODE 1 6. ANODE 2	STYLE 12: PIN 1. ANODE 2 2. ANODE 2 3. CATHODE 1 4. ANODE 1 5. ANODE 1 6. CATHODE 2
STYLE 13: PIN 1. ANODE 2. N/C 3. COLLECTOR 4. EMITTER 5. BASE 6. CATHODE	STYLE 14: PIN 1. VREF 2. GND 3. GND 4. IOUT 5. VEN 6. VCC	STYLE 15: PIN 1. ANODE 1 2. ANODE 2 3. ANODE 3 4. CATHODE 3 5. CATHODE 2 6. CATHODE 1	STYLE 16: PIN 1. BASE 1 2. EMITTER 2 3. COLLECTOR 2 4. BASE 2 5. EMITTER 1 6. COLLECTOR 1	STYLE 17: PIN 1. BASE 1 2. EMITTER 1 3. COLLECTOR 2 4. BASE 2 5. EMITTER 2 6. COLLECTOR 1	STYLE 18: PIN 1. VIN1 2. VCC 3. VOUT2 4. VIN2 5. GND 6. VOUT1
STYLE 19: PIN 1. I OUT 2. GND 3. GND 4. V CC 5. V EN 6. V REF	STYLE 20: PIN 1. COLLECTOR 2. COLLECTOR 3. BASE 4. EMITTER 5. COLLECTOR 6. COLLECTOR	STYLE 21: PIN 1. ANODE 1 2. N/C 3. ANODE 2 4. CATHODE 2 5. N/C 6. CATHODE 1	STYLE 22: PIN 1. D1 (i) 2. GND 3. D2 (i) 4. D2 (c) 5. VBUS 6. D1 (c)	STYLE 23: PIN 1. Vn 2. CH1 3. Vp 4. N/C 5. CH2 6. N/C	STYLE 24: PIN 1. CATHODE 2. ANODE 3. CATHODE 4. CATHODE 5. CATHODE 6. CATHODE
STYLE 25: PIN 1. BASE 1 2. CATHODE 3. COLLECTOR 2 4. BASE 2 5. EMITTER 6. COLLECTOR 1	STYLE 26: PIN 1. SOURCE 1 2. GATE 1 3. DRAIN 2 4. SOURCE 2 5. GATE 2 6. DRAIN 1	STYLE 27: PIN 1. BASE 2 2. BASE 1 3. COLLECTOR 1 4. EMITTER 1 5. EMITTER 2 6. COLLECTOR 2	STYLE 28: PIN 1. DRAIN 2. DRAIN 3. GATE 4. SOURCE 5. DRAIN 6. DRAIN	STYLE 29: PIN 1. ANODE 2. ANODE 3. COLLECTOR 4. EMITTER 5. BASE/ANODE 6. CATHODE	STYLE 30: PIN 1. SOURCE 1 2. DRAIN 2 3. DRAIN 2 4. SOURCE 2 5. GATE 1 6. DRAIN 1

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.

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DATE 15 MAY 2008

- NOTES:
 1. DIMENSIONING AND TOLERANCING PER
 ASME Y14.5M, 1994.
 2. CONTROLLING DIMENSION: MILLIMETERS.

 - DIMENSION & APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.15 AND 0.30 mm FROM THE TERMINAL TIP.

	MILLIMETERS				
DIM	MIN	MAX			
Α	0.45	0.55			
A1	0.00	0.05			
A2	0.07 REF				
b	0.20	0.30			
D	1.45 BSC				
Е	1.00 BSC				
е	0.50 BSC				
L	0.30	0.40			
11		0.15			

GENERIC MARKING DIAGRAM*



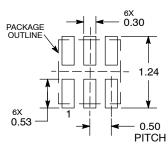
= Specific Device Code Χ

Μ = Date 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.

е 6X L DETAIL A 6X b 0.10 C A B Ф С ноте з 0.05 **BOTTOM VIEW**

MOUNTING FOOTPRINT



DIMENSIONS: MILLIMETERS

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

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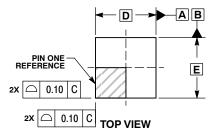
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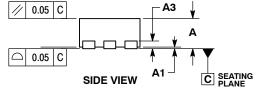
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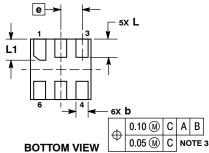


UDFN6, 1x1, 0.35P CASE 517BX-01 ISSUE O

DATE 18 MAY 2011







NOTES:

- DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
- ASME 114.5M, 1994.

 2. CONTROLLING DIMENSION: MILLIMETERS.

 3. DIMENSION b APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.15 AND 0.20 MM FROM TERMINAL TIP.

 4. PACKAGE DIMENSIONS EXCLUSIVE OF BURRS AND MOLD FLASH.

	MILLIMETERS			
DIM	MIN	MAX		
Α	0.45	0.55		
A1	0.00	0.05		
А3	0.13 REF			
b	0.12	0.22		
D	1.00	BSC		
E	1.00	BSC		
е	0.35 BSC			
L	0.25	0.35		
L1	0.30	0.40		

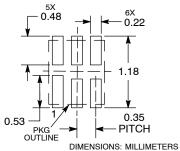
GENERIC MARKING DIAGRAM*



X = Specific Device Code

M = Date Code

RECOMMENDED SOLDERING 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.

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^{*}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.



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