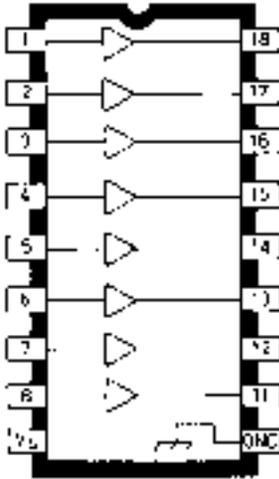


2595

8-CHANNEL SATURATED SINK DRIVER

UDN2595A (DIP)



Dwg. No. A-11,407

ABSOLUTE MAXIMUM RATINGS at 25°C Free-Air Temperature for any one driver (unless otherwise noted)

Output Voltage, V_{CE}	20 V
Supply Voltage, V_S	20 V
Input Voltage, V_{IN}	20 V
Output Current, I_C	200 mA
Ground Terminal Current, I_{GND} ...	1.6 A
Package Power Dissipation, P_D	See Graph
Operating Temperature Range, T_A	-20°C to +85°C
Storage Temperature Range, T_S	-55°C to +150°C

Developed for use with low-voltage LED and incandescent displays requiring low output saturation voltage, the UDN2595A and A2595SLW meet many interface needs, including those exceeding the capabilities of standard logic buffers. The eight non-Darlington outputs of each driver can continuously and simultaneously sink load currents of 100 mA at ambient temperatures of up to +75°C.

The eight-channel driver's active-low inputs can be driven directly from TTL, Schottky TTL, DTL, 5 to 16 V CMOS, and NMOS logic. All input connections are on one side of the package, output connections on the other, for simplified printed wiring board layouts.

These drivers are packaged in plastic DIPs (suffix A) or surface-mountable wide-body SOICs (suffix LW), and are rated for operation over the temperature range of -20°C to +85°C. The A2595SLW is also available for operation to -40°C. To order, change the suffix from 'SLW' to 'ELW'.

FEATURES

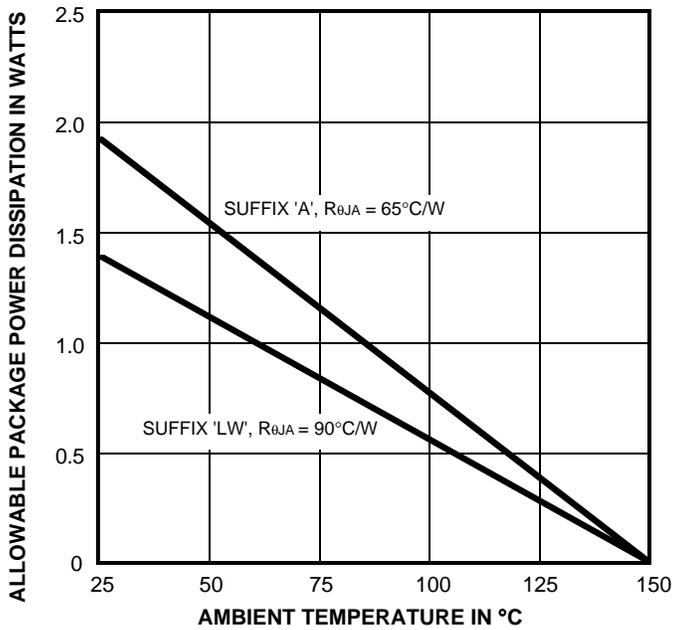
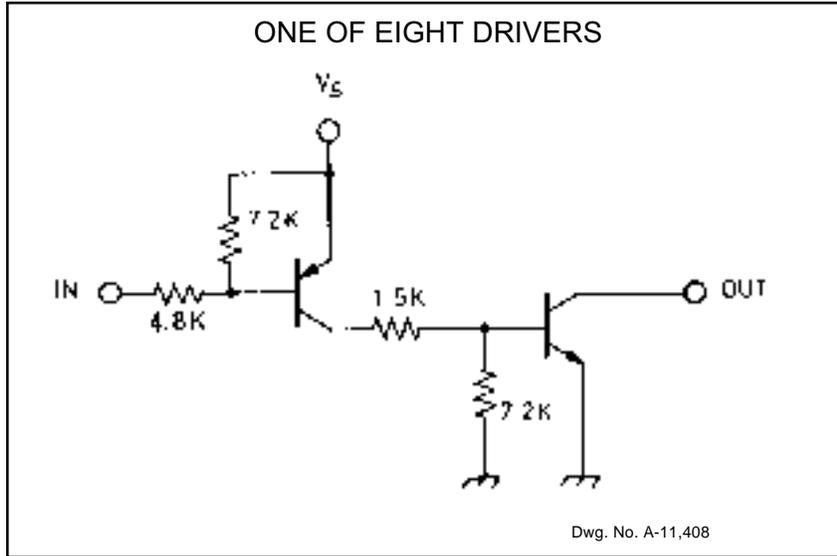
- Non-Inverting Function (Input Low = Output ON)
- 200 mA Current Rating
- 100 mA Continuous and Simultaneous (All outputs) to +85°C
- Low Saturation Voltage
- TTL, CMOS, NMOS Compatible
- Efficient Input/Output Pin Format
- DIP or SOIC Packaging

Always order by complete part number:

Part Number	Package
UDN2595A	18-Pin DIP
A2595SLW	20-Lead Wide-Body SOIC

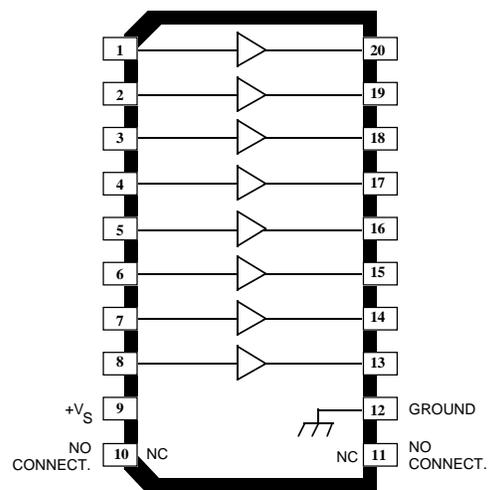
2595 8-CHANNEL SATURATED SINK DRIVER

FUNCTIONAL BLOCK DIAGRAM



Dwg. GS-009-1B

A2595SLW (SOIC)



Dwg. PP-064-1

2595
8-CHANNEL
SATURATED SINK DRIVER

ELECTRICAL CHARACTERISTICS at $T_A = +25^\circ\text{C}$, $V_S = 5.0\text{ V}$ (unless otherwise noted).

Characteristic	Symbol	Test Conditions	Limits		
			Min.	Max.	Units
Output Leakage Current	I_{CEX}	$V_{IN} \geq 4.5\text{ V}$, $V_{OUT} = 20\text{ V}$, $T_A = 25^\circ\text{C}$	—	50	μA
		$V_{IN} \geq 4.6\text{ V}$, $V_{OUT} = 20\text{ V}$, $T_A = 70^\circ\text{C}$	—	100	μA
Output Saturation Voltage	$V_{CE(SAT)}$	$V_{IN} = 0.4\text{ V}$, $I_{OUT} = 50\text{ mA}$	—	0.5	V
		$V_{IN} = 0.4\text{ V}$, $I_{OUT} = 100\text{ mA}$	—	0.6	V
Input Current	$I_{IN(ON)}$	$V_{IN} = 0.4\text{ V}$, $I_{OUT} = 100\text{ mA}$	—	-1.6	mA
		$V_{IN} = 0.4\text{ V}$, $I_{OUT} = 100\text{ mA}$, $V_S = 15\text{ V}$	—	-5.0	mA
Input Voltage	$V_{IN(ON)}$	$I_{OUT} = 100\text{ mA}$, $V_{OUT} \leq 0.6\text{ V}$	—	0.4	V
	$V_{IN(OFF)}$	$I_{OUT} = 100\text{ }\mu\text{A}$, $T_A = 70^\circ\text{C}$	4.6	—	V
Input Capacitance	C_{IN}		—	25	pF
Supply Current	I_S	$V_{IN} = 0.4\text{ V}$, $I_{OUT} = 100\text{ mA}$	—	6.0	mA
		$V_{IN} = 0.4\text{ V}$, $I_{OUT} = 100\text{ mA}$, $V_S = 15\text{ V}$	—	20	mA

- NOTES: 1. Negative current is defined as coming out of the specified device pin.
 2. The $V_{IN(ON)}$ voltage limit guarantees a minimum output sink current per the specified conditions.
 3. I_S is measured with any one of eight drivers turned ON.

The products described here are manufactured under one or more U.S. patents or U.S. patents pending.

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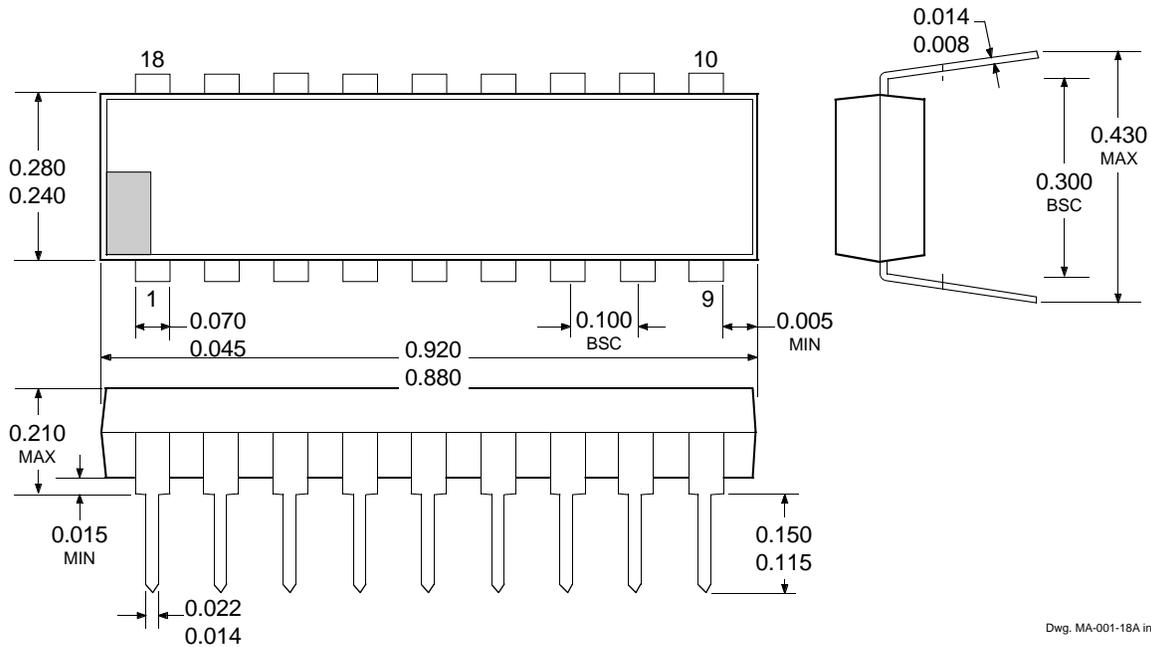
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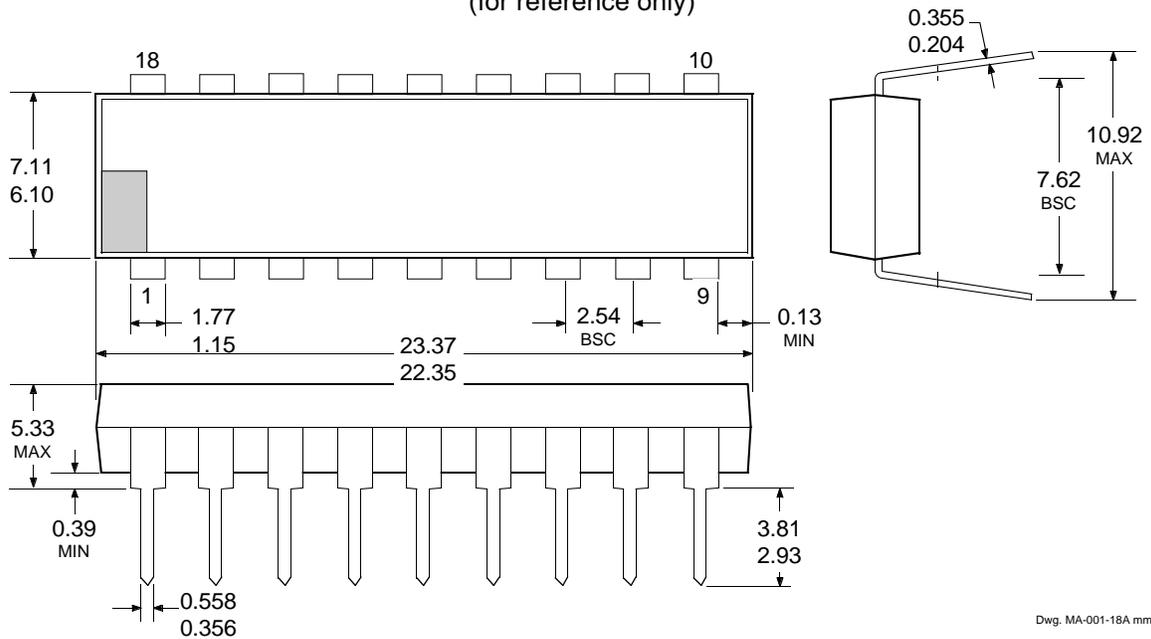
2595 8-CHANNEL SATURATED SINK DRIVER

UDN2595A

Dimensions in Inches
(controlling dimensions)



Dimensions in Millimeters
(for reference only)



- NOTES:
1. Exact body and lead configuration at vendor's option within limits shown.
 2. Lead spacing tolerance is non-cumulative.
 3. Lead thickness is measured at seating plane or below.

