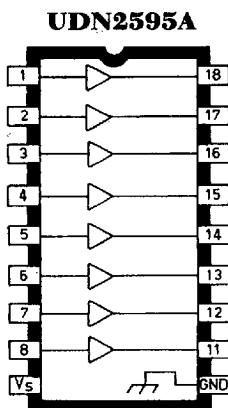


8-CHANNEL SATURATED SINK DRIVERS



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_O	200mA
Ground Terminal Current, I_{GND}	1.6A
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

Note that the UDN2595A (dual in-line package) and UDN2595LW (small-outline IC package) are electrically identical and share a common pin number assignment.

Developed for use with low-voltage LED and incandescent displays requiring low output saturation voltage, the UDN2595A and UDN2595LW 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.

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

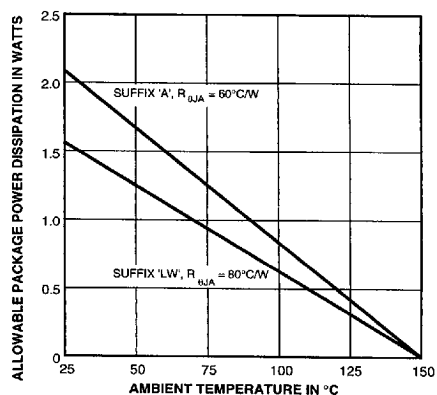
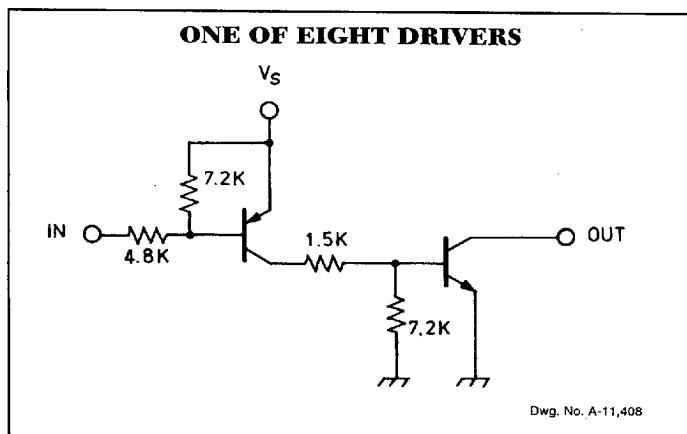
Always order by complete part number:

Part Number	Package
UDN2595A	18-Pin DIP
UDN2595LW	18-Lead Wide-Body SOIC

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.



Dwg. No. GP-018B