

# Octal High Voltage, **High Current Darlington Transistor Arrays**

The eight NPN Darlington connected transistors in this family of arrays are ideally suited for interfacing between low logic level digital circuitry (such as TTL, CMOS or PMOS/NMOS) and the higher current/voltage requirements of lamps, relays, printer hammers or other similar loads for a broad range of computer, industrial, and consumer applications. All devices feature open-collector outputs and free wheeling clamp diodes for transient suppression.

The ULN2803 is designed to be compatible with standard TTL families while the ULN2804 is optimized for 6 to 15 volt high level CMOS or PMOS.

#### **MAXIMUM RATINGS** ( $T_A = 25^{\circ}C$ and rating apply to any one device in the package, unless otherwise noted.)

Rating	Symbol	Value	Unit
Output Voltage	٧o	50	V
Input Voltage (Except ULN2801)	VI	30	V
Collector Current – Continuous	IC	500	mA
Base Current – Continuous	ΙΒ	25	mA
Operating Ambient Temperature Range	TA	0 to +70	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C
Junction Temperature	TJ	125 °C	

 $R_{\theta JA} = 55^{\circ} \text{C/W}$ Do not exceed maximum current limit per driver.

#### **ORDERING INFORMATION**

	Characteristics			
Device	Input Compatibility	VCE(Max)/IC(Max)	Operating Temperature Range	
ULN2803A ULN2804A	TTL, 5.0 V CMOS 6 to 15 V CMOS, PMOS	50 V/500 mA	$T_A = 0 \text{ to } + 70^{\circ}\text{C}$	

## **ULN2803 ULN2804**

### **OCTAL PERIPHERAL DRIVER ARRAYS**

**SEMICONDUCTOR TECHNICAL DATA** 



