

**ULN2803**

线性集成电路

EIGHT DARLINGTON阵列

描述

UTC ULN2803是高压，大电流达林顿
司机由八个NPN达林顿对组成。

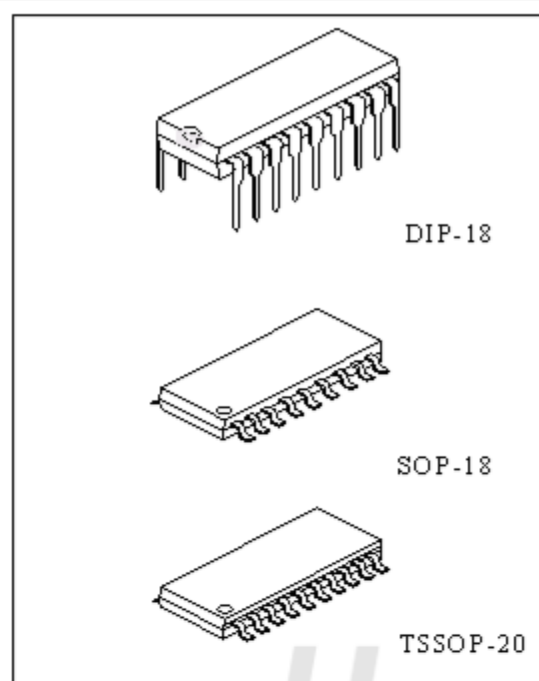
特征

*输出电流（单路输出）500mA MAX.

*高维持电压输出50V MIN.

*输出钳位二极管

*与各种类型的逻辑兼容的输入



订购信息

订货号		包	包装
无铅	无卤素		
ULN2803L-D18-T	ULN2803G-D18-T	DIP-18	管
-	ULN2803G-S18-R	SOP-18	卷带卷
-	ULN2803G-P20-R	TSSOP-20	卷带卷

ULN2803L-D18-T

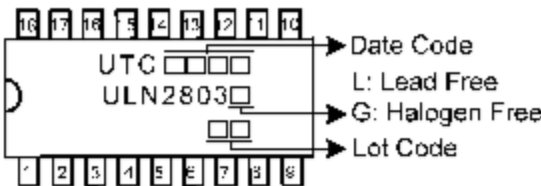
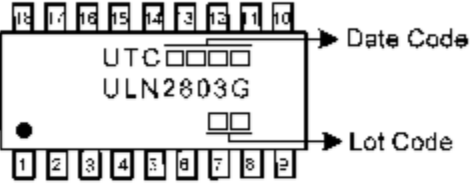
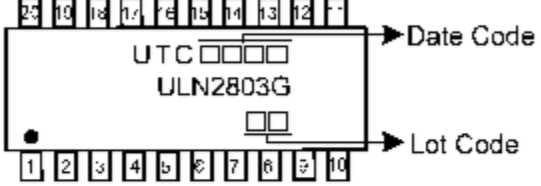
(1) Packing Type
(2) Package Type
(3) Green Package

(1) T: Tube, R: Tape Reel
(2) D18: DIP-18, S18: SOP-18, P20: TSSOP-20
(3) Lead Free, G: Halogen Free and Lead Free

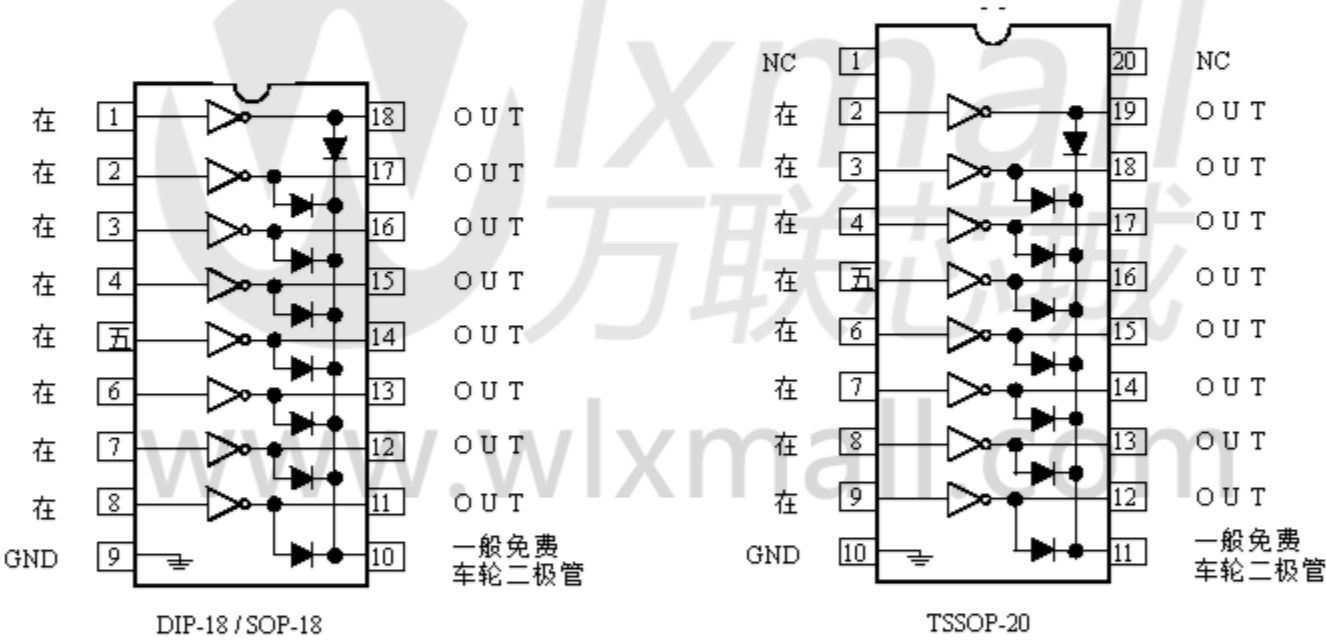
ULN2803

线性集成电路

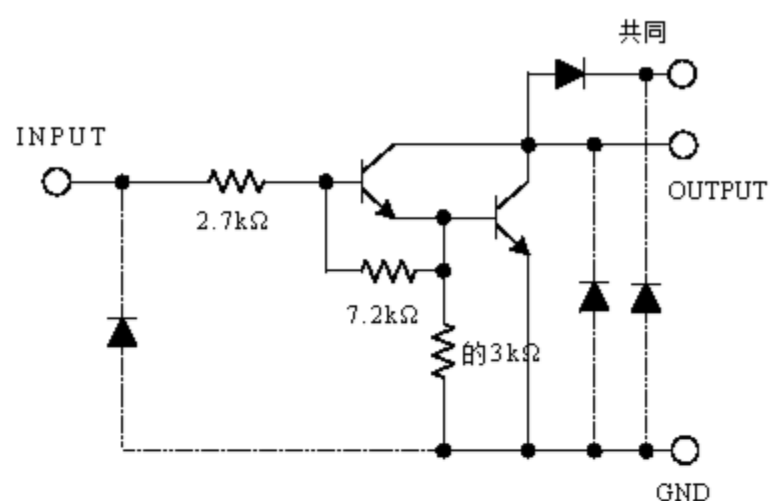
打标

DIP-18	
SOP-18	
TSSOP-20	

引脚配置



示例（每个驱动程序）



注意：输入和输出寄生二极管不能用作钳位二极管。

 *Wlxmall*
万联芯城
www.wlxmall.com

绝对最大额定值

参数		符号	额定值	单元
输入电压		V IN	-0.5~30	V
输出维持电压		V CE (SUS)	-0.5~50	V
输出电流		我 输 了	500	毫安/CH
钳位二极管反向电压		VR	50	V
钳位二极管正向电流		我 F	500	嘛
功耗	DIP-18	P D	1.47	w ^
	SOP-18		0.54 / 0.625 (注)	
	TSSOP-20		0.52	
工作温度		T OPR	-40~+85	C
储存温度		T STG	-40~+150	C

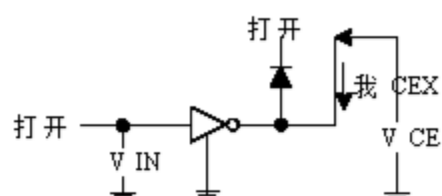
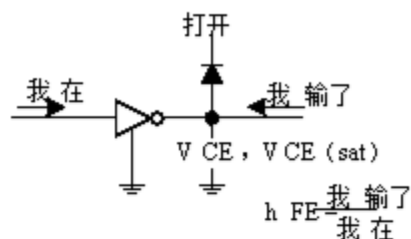
注意事项：1.在玻璃环氧树脂PCB（30x30x1.6mm铜50%）
2.绝对最大额定值仅为应力额定值，并不表示功能设备运行.该
器件可能会损坏超过绝对最大额定值.

电气特性（Ta = 25℃，除非另有说明）

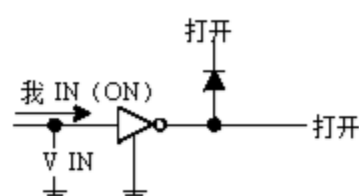
参数	符号	测试 电路	测试条件	MIN	TYP	MAX	UNIT
输出漏电流	我 CEX	1	V CE = 50V, T A = 25℃ V CE = 50V, T A = 85℃			50 100	μA
集电极 - 发射极 饱和电压	V CE (SAT)	2	I OUT = 350mA, I IN = 500μA I OUT = 200mA, I IN = 350μA I OUT = 100mA, I IN = 250μA		1.3 1.1 0.9	1.6 1.3 1.1	V
输入电流	上	我 IN (ON)	3	V IN = 3.85V, I OUT = 350mA	0.93	1.35	嘛
	关闭	我 在 (关)	4	I OUT = 500μA, T A = 85℃	50	65	μA
输入电压（输出开）	V IN (ON)	五	V CE = 2.0V I OUT = 200mA I OUT = 250mA I OUT = 300mA			2.4 2.7 3.0	V
钳位二极管反向电流	我 R	6	V R = 50V, T A = 25℃ V R = 50V, T A = 85℃			50 100	μA
钳位二极管正向电压	V F	7	I F = 350mA			2.0	V
输入电容	C IN				15	25	pF的
开启延迟	t ON	8	V OUT = 50V, R L = 125Ω, C L = 15pF		0.1	1	μS
关机延迟	t OFF	8	V OUT = 50V, R L = 125Ω, C L = 15pF		0.2	1	μS

测试电路

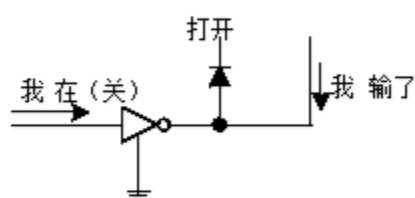
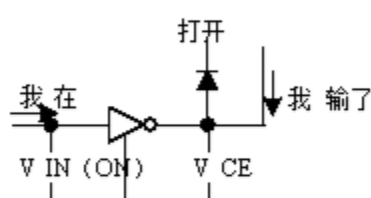
我 CEX

 $V_{CE(sat)}$, h_{FE} 

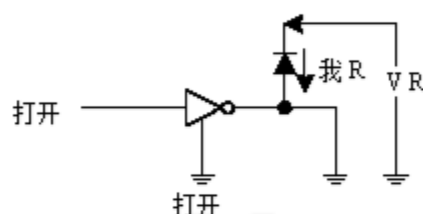
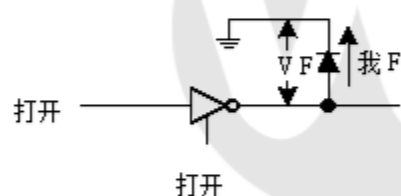
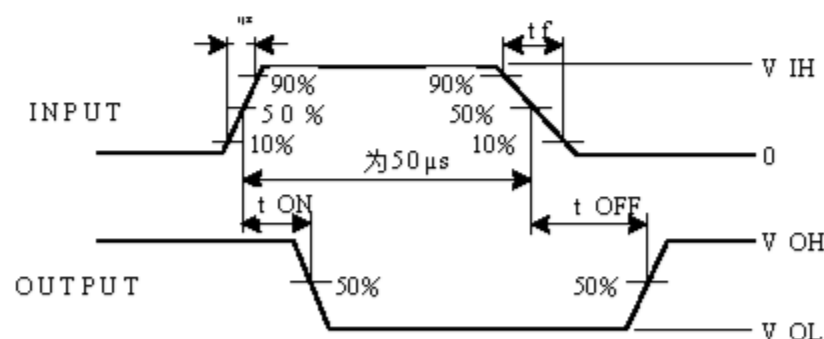
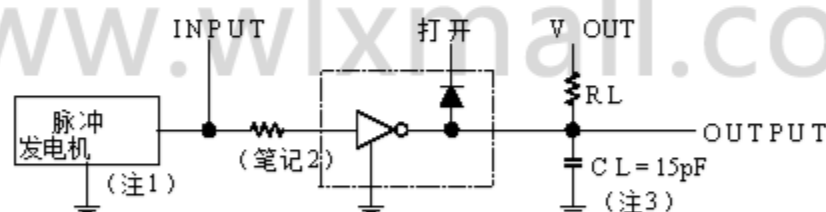
我 IN (ON)



我在 (关)

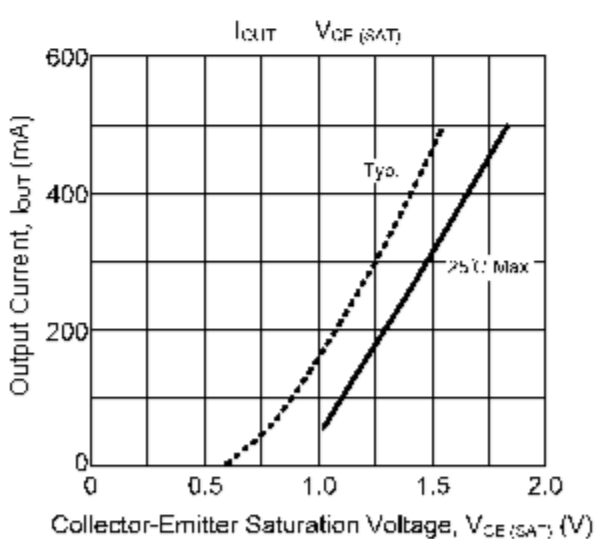
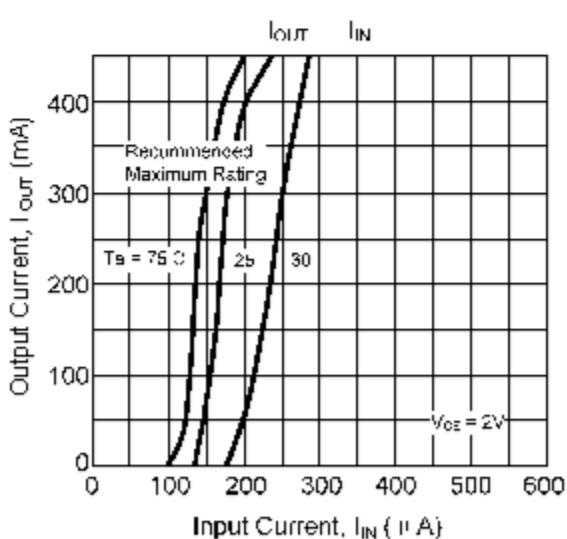
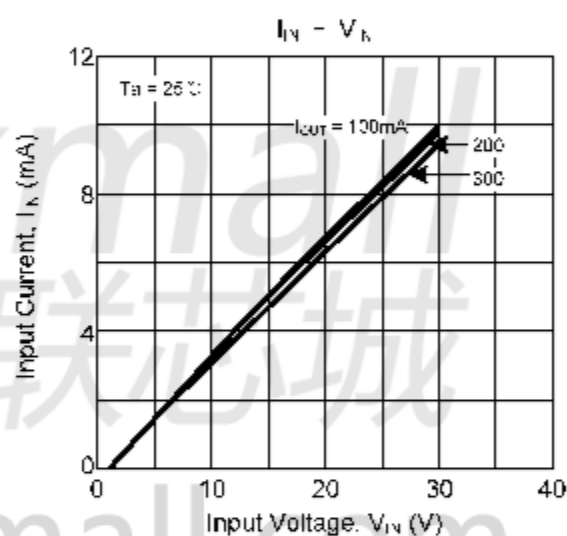
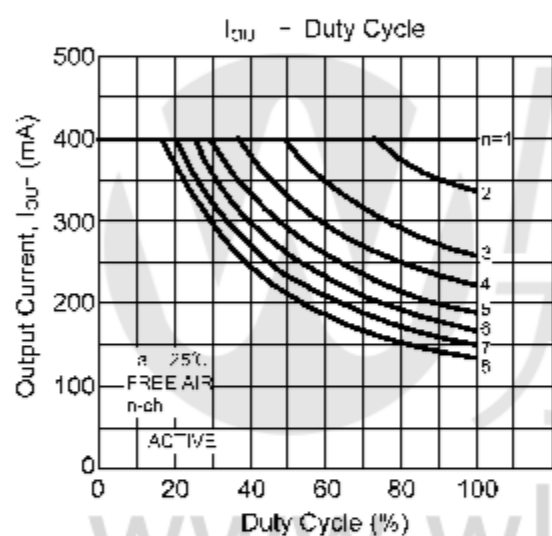
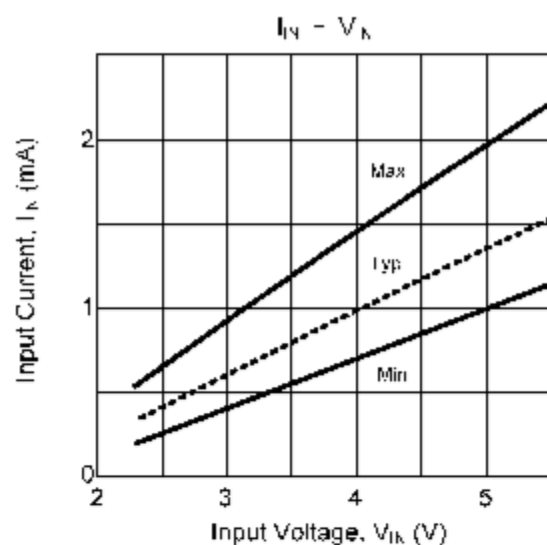
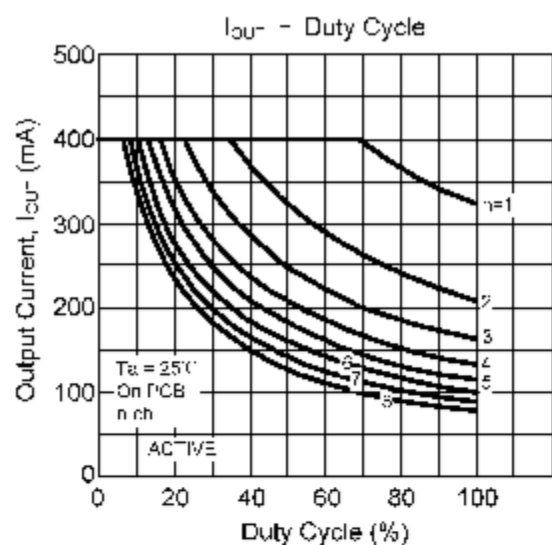
 $V_{IN(ON)}$ 

我 R

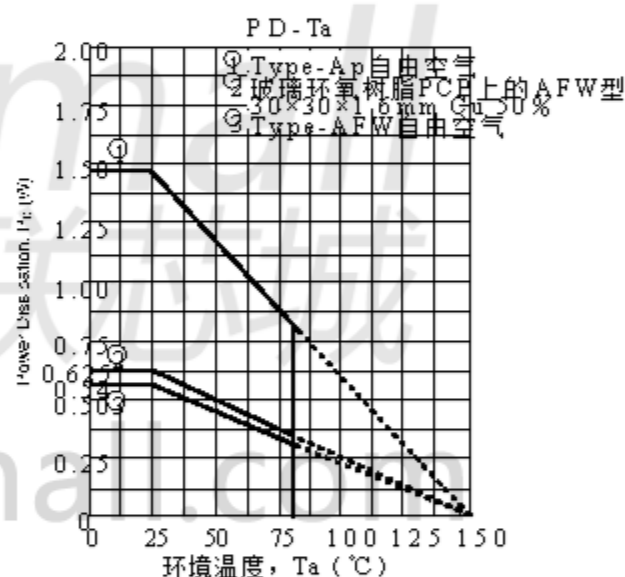
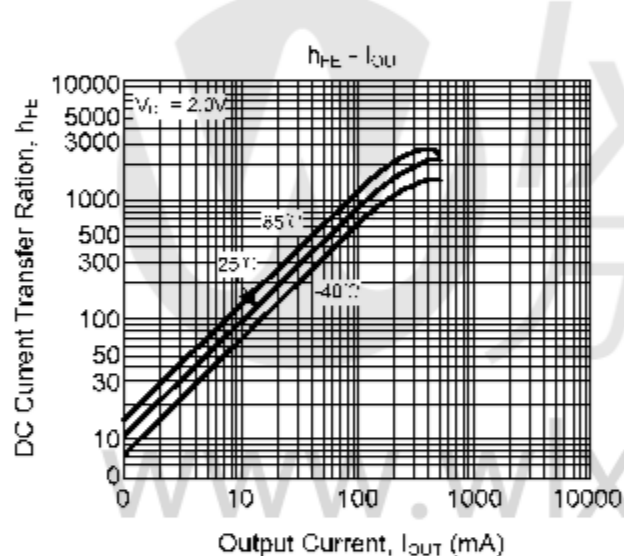
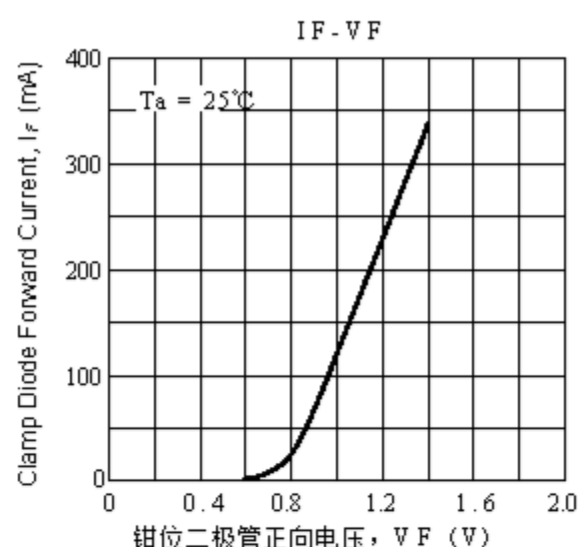
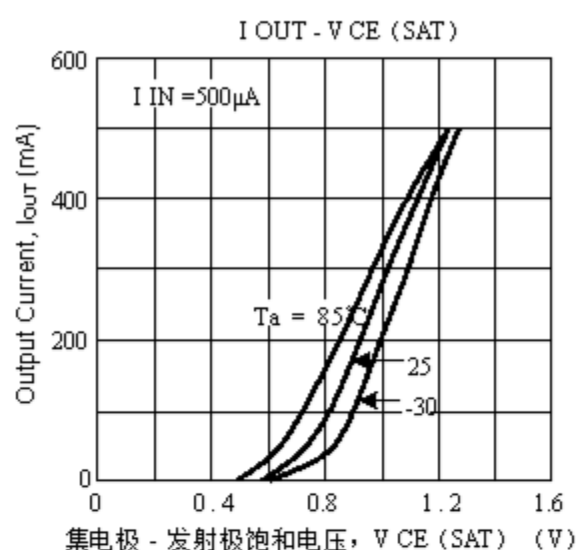
7. V_F  t_{ON} , t_{OFF} 

注意: 1. 脉冲宽度 50 μ s, 占空比 10%
 输出阻抗 50 Ω , $t_r \leq 5$ ns, $t_f \leq 10$ ns
 $R_L: 0$, $V_{IH}: 3$ V
 C_L 包括探针和夹具电容.

典型特征



典型特征 (续)



UTC对于使用产品所产生的设备故障不承担任何责任
超过, 即使瞬间, 额定值 (例如最大额定值, 操作条件范围或
其他参数) 列在任何和所有UTC产品描述或包含的产品规格
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