

MJD127**PNP SILICON DARLINGTON TRANSISTOR**

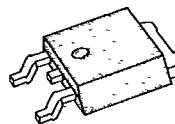
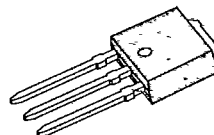
T-33-31

D-PACK FOR SURFACE MOUNT APPLICATIONS

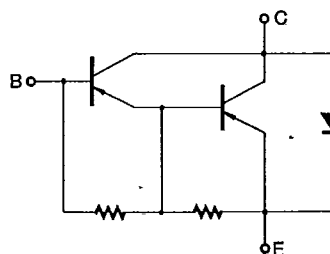
- High DC Current Gain
- Built-in a Damper Diode at E-C
- Lead Formed for Surface Mount Applications (No Suffix)
- Straight Lead (I-PACK, "-1" Suffix)
- Electrically Similar to Popular TIP127

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	-100	V
Collector Emitter Voltage	V_{CEO}	-100	V
Emitter Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-8	A
Collector Current (Pulse)	I_C	-16	A
Base Current	I_B	-120	A
Collector Dissipation ($T_a = 25^\circ\text{C}$)	P_c	20	W
Collector Dissipation ($T_a = 25^\circ\text{C}$)	P_c	1.75	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{slg}	-65 ~ 150	$^\circ\text{C}$

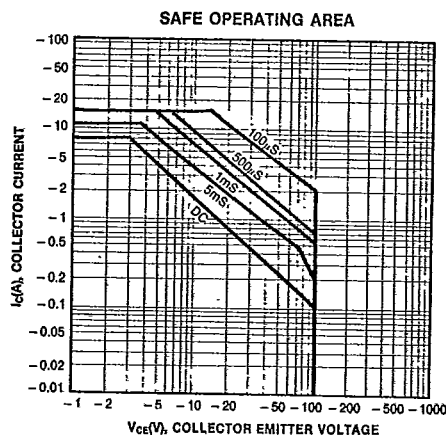
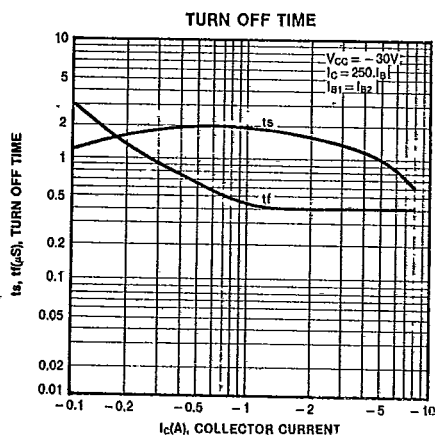
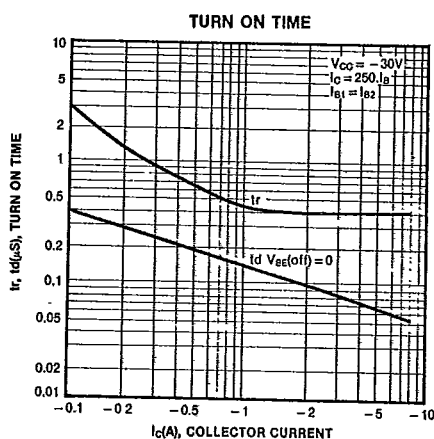
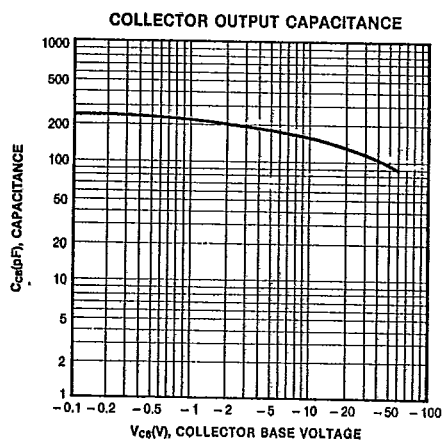
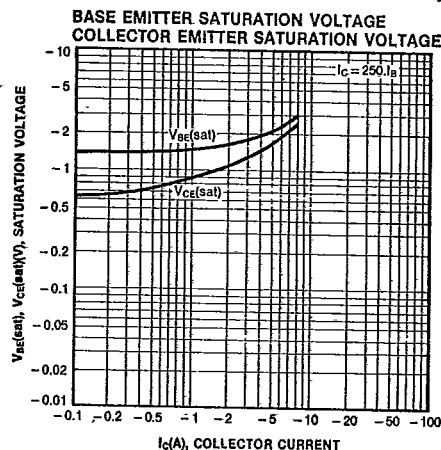
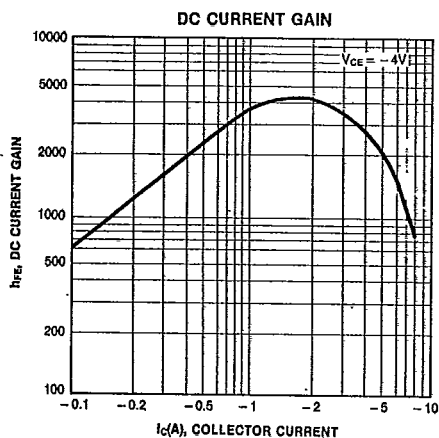
D-PACK**I-PACK****ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)**

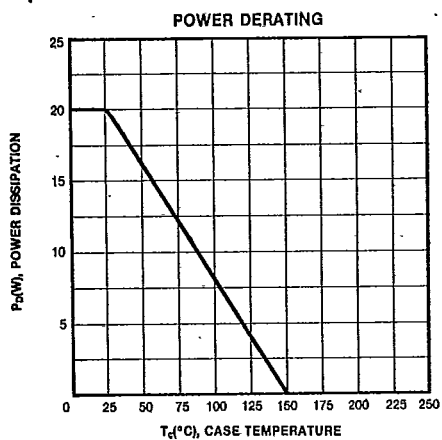
Characteristic	Symbol	Test Condition	Min	Max	Unit
*Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = -30\text{mA}, I_B = 0$	-100		V
Collector Cutoff Current	I_{CEO}	$V_{CE} = -50\text{V}, I_B = 0$		-10	μA
Collector Cutoff Current	I_{CBO}	$V_{CB} = -100\text{V}, I_E = 0$		-10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$		-2	mA
*DC Current Gain	h_{FE}	$V_{CE} = -4\text{V}, I_C = -4\text{A}$	1000	12K	
		$V_{CE} = -4\text{V}, I_C = -8\text{A}$	100		
*Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -4\text{A}, I_B = -16\text{mA}$		-2	V
		$I_C = -8\text{A}, I_B = -80\text{mA}$		-4	V
*Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -8\text{A}, I_B = -80\text{mA}$		-4.5	V
*Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -4\text{A}, I_C = -4\text{A}$		-2.8	V
Output Capacitance	C_{OB}	$V_{CB} = -10\text{V}, I_E = 0$ $f = 0.1\text{MHz}$		300	pF

* Pulse Test: $PW \leq 300\mu\text{S}$, Duty Cycle $\leq 2\%$ 

MJD127 PNP SILICON DARLINGTON TRANSISTOR

T-33-31



MJD127**PNP SILICON DARLINGTON TRANSISTOR**

T-33-31