



Micro Commercial Components

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TIP125/126/127

Features

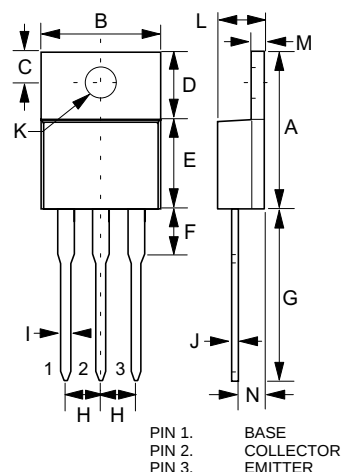
- TO-220 package
- The complementary NPN types are the TIP121/2/3 respectively
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking : Part Number

Silicon PNP Darlington Power Transistors

Absolute Maximum Ratings @ $T_a = 25^\circ\text{C}$ (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0} TIP125 TIP126 TIP127	Collector-base voltage (Open emitter)	-60 -80 -100	V
V_{CE0} TIP125 TIP126 TIP127	Collector-emitter voltage (Open base)	-60 -80 -100	V
V_{EBO}	Emitter-base Voltage (Open collector)	-5	V
I_C	Collector Current	-5	A
I_{CM}	Collector Current Pulse	-8	A
I_B	Base Current	-0.12	A
P_C	Total Device Dissipation ($T_a=25^\circ\text{C}$)	2	W
	Total Device Dissipation ($T_c=25^\circ\text{C}$)	40	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-65 to +150	$^\circ\text{C}$

TO-220



Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
$V_{CE(SUS)}$ TIP125 TIP126 TIP127	Collector-emitter sustaining voltage ($I_C=-100\text{mA}$; $I_B=0$)	-60 -80 -100		V
$V_{CE(sat)}$	Collector-emitter Saturation Voltage ($I_C=-3A$; $I_B=-0.012A$) ($I_C=-5A$; $I_B=-0.02A$)		-2.0 -4.0	V
V_{BE}	Base-emitter Voltage ($I_C=-3A$; $V_{CE}=-3V$)		-2.5	V
I_{CBO} TIP125 TIP126 TIP127	Collector cut-off current ($V_{CB}=-60V$; $I_E=0$) ($V_{CB}=-80V$; $I_E=0$) ($V_{CB}=-100V$; $I_E=0$)	-0.2		mA
I_{CEO} TIP125 TIP126 TIP127	Collector cut-off current ($V_{CE}=-30V$; $V_{EB}=0$) ($V_{CE}=-40V$; $V_{EB}=0$) ($V_{CE}=-50V$; $V_{EB}=0$)	-0.5		mA
I_{EBO}	Emitter cut-off current ($V_{EB}=-5V$; $I_C=0$)		-2.0	mA
H_{fe}	DC current gain ($I_C=-0.5A$; $V_{CE}=-3V$) ($I_C=-3.0A$; $V_{CE}=-3V$)	1000 1000		
C_{OB}	Output capacitance ($I_E=0$; $V_{CB}=-10V$; $f=0.1\text{MHz}$)		300	PF

DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.335	.368	8.50	9.35	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	Ø
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

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