


DHA[®]

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TIP127/TIP122

Power Darlington Transistor

Applications

Medium power linear switching applications

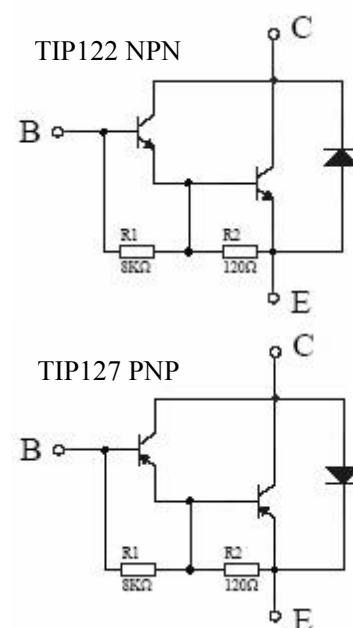
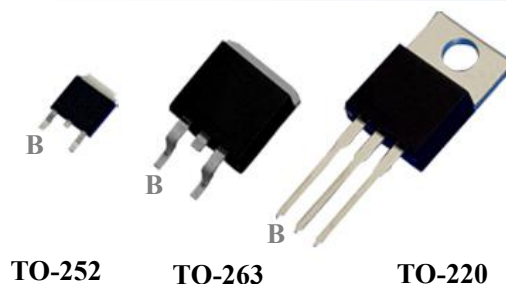
TIP122 (NPN), TIP127 (PNP)

Features

- Shunt resistor connected between Base - Emitter
- Including freewheeling diodes

Absolute Maximum Ratings

Symbol	Ratings	Units
V_{CBO}	100	V
V_{CEO}	100	V
V_{EBO}	5	V
I_C	5	A
I_{CM}	8	A
I_B	120	mA
P_c (TO-252/ With heat sink)	20 ($T_c=25^{\circ}C$)	W
P_c (TO-220/ With heat sink)	65 ($T_c=25^{\circ}C$)	W
P_c (TO-263/ With heat sink)	65 ($T_c=25^{\circ}C$)	W
T_j	150	$^{\circ}C$
T_{stg}	-65~150	$^{\circ}C$



Internal Equivalent Circuit

Electrical Characteristics ($T_a=25^{\circ}C$)

Symbol	Test conditions	Min	Max	Units
V_{CEO} (SUS)	$I_C=100mA$, $I_B=0$	100		V
I_{CEO}	$V_{CE}=50V$, $I_B=0$		2	mA
I_{CBO}	$V_{CB}=100V$, $I_E=0$		1	mA
I_{EBO}	$V_{BE}=5V$, $I_C=0$		2	mA
h_{FE}	$V_{CE}=3V$, $I_C=0.5A$ $V_{CE}=3V$, $I_C=3A$	1000 1000		
V_{CE} (sat)	$I_C=3A$, $I_B=12mA$ $I_C=5A$, $I_B=20mA$		2.0 4.0	V V
V_{BE} (on)	$V_{CE}=3V$, $I_C=3A$		2.5	V
C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=0.1MHz$		200	pF

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