

TO-220 Plastic-Encapsulated Transistors

TIP125, 126, 127 Darlington TRANSISTOR (PNP)

FEATURES

Power dissipation

P_{CM} : 2 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : -5 A

Collector-base voltage

$V_{(BR)CBO}$: TIP125: -60 V

TIP126: -80 V

TIP127: -100 V

Operating and storage junction temperature range

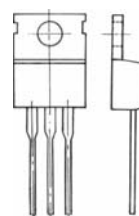
T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

TO-220

1. BASE

2. COLLECTOR

3. EMITTER



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ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	TIP125 TIP126 TIP127	$V_{(BR)CBO}$	$I_C = -1mA, I_E = 0$	-60 -80 -100	V
Collector-emitter breakdown voltage	TIP125 TIP126 TIP127	$V_{(BR)CEO}$	$I_C = -100mA, I_B = 0$	-60 -80 -100	V
Collector cut-off current	TIP125 TIP126 TIP127	I_{CBO}	$V_{CB} = -60V, I_E = 0$ $V_{CB} = -80V, I_E = 0$ $V_{CB} = -100V, I_E = 0$	-0.2 -0.2 -0.2	mA
Collector cut-off current	TIP125 TIP126 TIP127	I_{CEO}	$V_{CE} = -30V, I_B = 0$ $V_{CE} = -40V, I_B = 0$ $V_{CE} = -50V, I_B = 0$	-0.5 -0.5 -0.5	mA
Emitter cut-off current		I_{EBO}	$V_{EB} = -5V, I_C = 0$	-2	mA
DC current gain	$h_{FE(1)}$	$V_{CE} = -3V, I_C = -0.5A$	1000		
	$h_{FE(2)}$	$V_{CE} = -3V, I_C = -3A$	1000		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3A, I_B = -12mA$ $I_C = -5A, I_B = -20mA$		-2 -4	V
Base-emitter ON voltage	$V_{BE(on)}$	$V_{CE} = -3V, I_C = -3A$		-2.5	V