

### TIP125, 126, 127 Darlington TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$$P_{CM}: 2 \text{ W (Tamb=25°C)}$$

Collector current

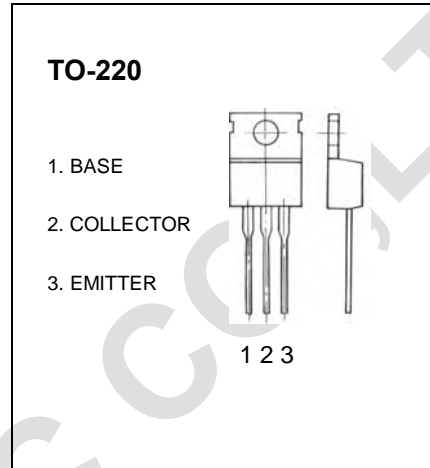
$$I_{CM}: -5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: \begin{array}{ll} \text{TIP125:} & -60 \text{ V} \\ \text{TIP126:} & -80 \text{ V} \\ \text{TIP127:} & -100 \text{ V} \end{array}$$

Operating and storage junction temperature range

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



#### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

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