Transys Electronics LIMITED

TO-220 Plastic-Encapsulated Transistors

TIP125, 126, 127   Darlington TRANSISTOR (PNP)

FEATURES

Power dissipation
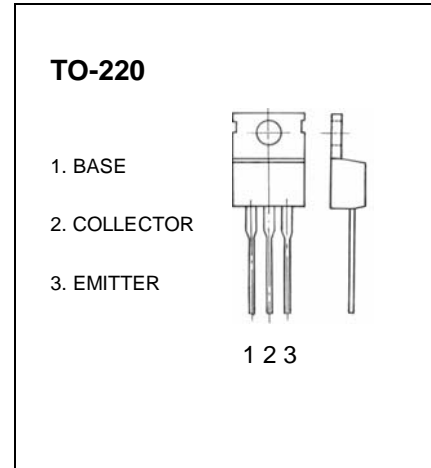
P_{CM}:   2   W (Tamb=25℃)

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℃ to +150℃

TO-220

1. BASE

2. COLLECTOR

3. EMITTER

1 2 3

ELECTRICAL   CHARACTERISTICS (Tamb=25℃   unless   otherwise   specified)

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