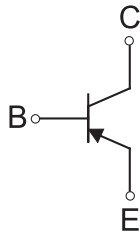


## BD234 / BD236 / BD238 TRANSISTOR (PNP)

### FEATURES

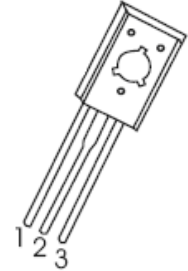
- Complement to BD233/BD235/BD237 respectively

Equivalent Circuit



TO-126

1. EMITTER
2. COLLECTOR
3. BASE



### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter		Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	BD234	-45	V
		BD236	-60	
		BD238	-100	
V <sub>CEO</sub>	Collector-Emitter Voltage	BD234	-45	V
		BD236	-60	
		BD238	-80	
V <sub>EBO</sub>	Emitter-Base Voltage		-5	V
I <sub>C</sub>	Collector Current –Continuous		-2	A
P <sub>C</sub>	Collector Dissipation		1.25	W
P <sub>C</sub>	Collector Dissipation (T <sub>c</sub> =25°C)		25	W
R <sub>θJA</sub>	Thermal Resistance from Junction to Ambient		100	°C/W
R <sub>θJC</sub>	Thermal Resistance from Junction to Case		5	°C/W
T <sub>J</sub> , T <sub>stg</sub>	Operation Junction and Storage Temperature Range		-55~+150	°C

$T_a=25\text{ }^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	<b>BD234</b> <b>BD236</b> <b>BD238</b> $V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-45 -60 -100		V
Collector-emitter breakdown voltage	<b>BD234</b> <b>BD236</b> <b>BD238</b> $V_{(BR)CEO}$	$I_C=-100\text{mA}, I_B=0$	-45 -60 -80		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1\text{mA}, I_C=0$	-5		V
Collector cut-off current	<b>BD234</b> <b>BD236</b> <b>BD238</b> $I_{CBO}$	$V_{CB}=-45\text{V}, I_E=0$ $V_{CB}=-60\text{V}, I_E=0$ $V_{CB}=-100\text{V}, I_E=0$		-100	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$		-1	mA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-150\text{mA}$	40		
	$h_{FE(2)}$	$V_{CE}=-2\text{V}, I_C=-1\text{A}$	25		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-1\text{A}, I_B=-100\text{mA}$		-0.6	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=-250\text{mA}, f=10\text{MHz}$	3		MHz

