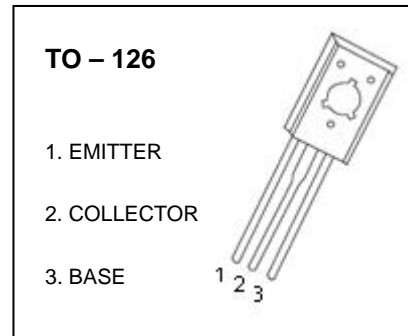


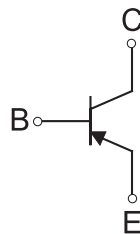
BD434 / BD436 / BD438 TRANSISTOR (PNP)

FEATURES

- Amplifier and Switching Applications
- Complement To BD433, BD435 And BD437



Equivalent Circuit



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter		Value	Unit
V_{CBO}	Collector-Base Voltage	BD434	-22	V
		BD436	-32	
		BD438	-45	
V_{CEO}	Collector-Emitter Voltage	BD434	-22	V
		BD436	-32	
		BD438	-45	
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current –Continuous		-4	A
P_C	Collector Power Dissipation		1.25	W
T_J, T_{stg}	Junction Temperature		-55-150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	BD434 $I_C=-100\mu\text{A}, I_E=0$	-22			V
		BD436	-32			
		BD438	-45			
Collector-emitter breakdown voltage	$V_{CE(SUS)}^{(1)}$	BD434 $I_C=-100\text{mA}, I_B=0$	-22			V
		BD436	-32			
		BD438	-45			
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-22\text{V}, I_E=0$ BD434				μA
		$V_{CB}=-32\text{V}, I_E=0$ BD436			-100	
		$V_{CB}=-45\text{V}, I_E=0$ BD438				
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_E=0$			-1	mA
DC current gain	$h_{FE(1)}^{(1)}$	$V_{CE}=-1\text{V}, I_C=-500\text{mA}$	85		375	
	$h_{FE(2)}^{(1)}$	$V_{CE}=-5\text{V}, I_C=-10\text{mA}$	BD434/BD436	40		
			BD438	30		
$h_{FE(3)}^{(1)}$	$V_{CE}=-1\text{V}, I_C=-2\text{A}$	BD434/BD436	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^{(1)}$	$I_C=-2\text{A}, I_B=-0.2\text{A}$ BD434/BD436			-0.5	V
		$I_C=-3\text{A}, I_B=-0.3\text{A}$ BD438			-0.7	
Base-emitter voltage	$V_{BE}^{(1)}$	$V_{CE}=-1\text{V}, I_C=-2\text{A}$ BD434/BD436 BD438			-1.1 -1.2	V
Transition frequency	f_T	$V_{CE}=-1\text{V}, I_C=-250\text{mA}$	3			MHz

⁽¹⁾Pulse test.

Static Characteristic

