



TO-126 Plastic-Encapsulate Transistors

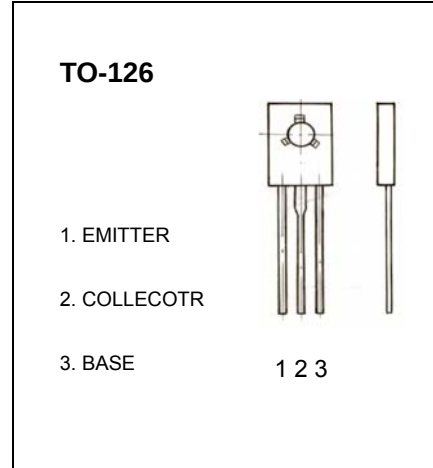
BD434,436 TRANSISTOR (PNP)

FEATURES

Amplifier and switching applications

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

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



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

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

⁽¹⁾Pulse test.

Typical Characteristics

BD434,BD436

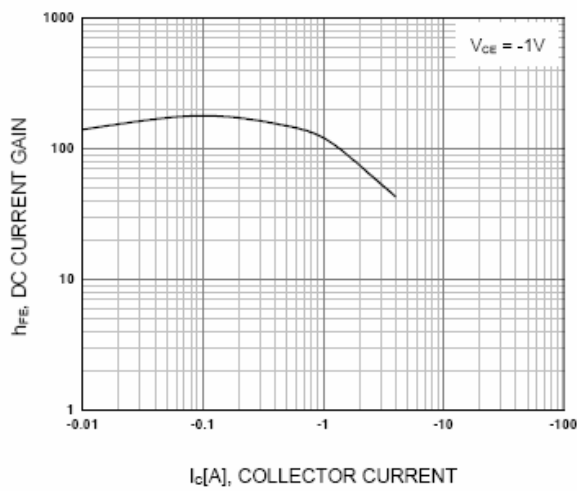


Figure 1. DC current Gain

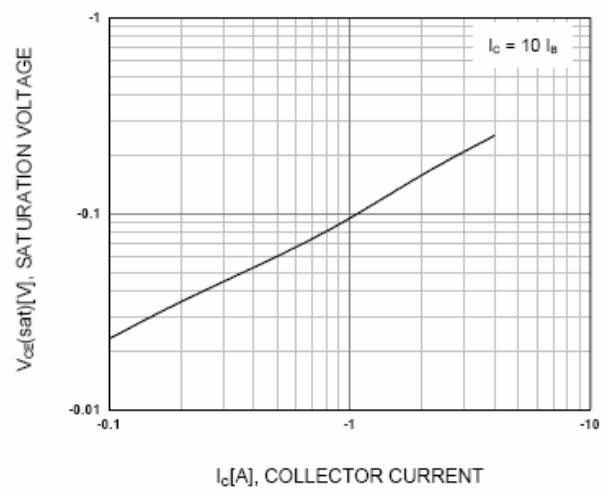


Figure 2. Collector-Emitter Saturation Voltage

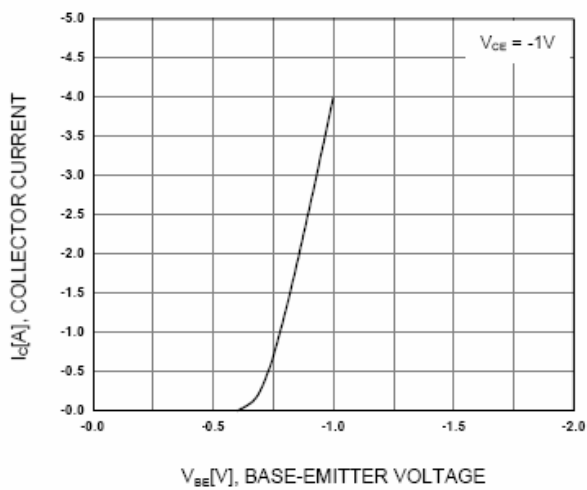


Figure 3. Base-Emitter On Voltage

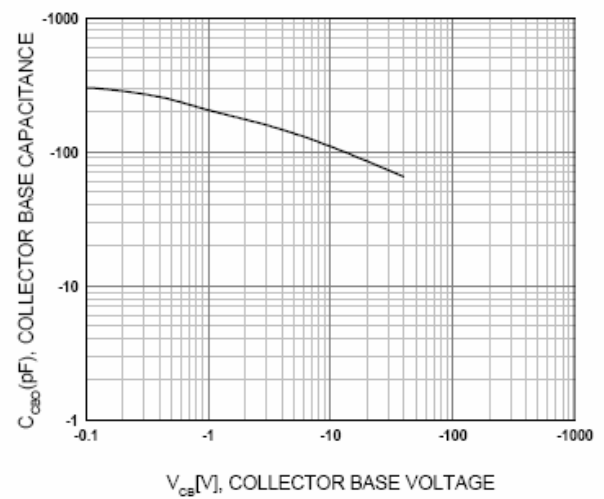


Figure 4. Collector-Base Capacitance

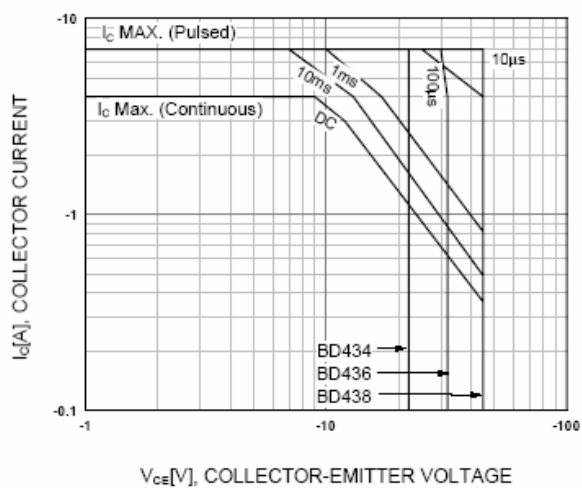


Figure 5. Safe Operating Area

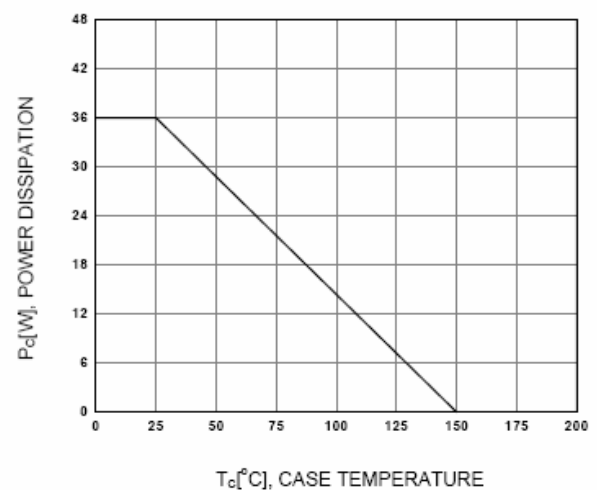


Figure 6. Power Derating