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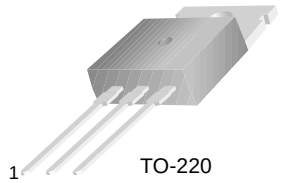
FAIRCHILD SEMICONDUCTOR™

BD244/A/B/C

Medium Power Linear and Switching Applications

- Complement to BD243, BD243A, BD243B and BD243C respectively



TO-220

1.Base 2.Collector 3.Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage		
	: BD244	- 45	V
	: BD244A	- 60	V
	: BD244B	- 80	V
	: BD244C	- 100	V
V_{CEO}	Collector-Emitter Voltage		
	: BD244	- 45	V
	: BD244A	- 60	V
	: BD244B	- 80	V
	: BD244C	- 100	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current (DC)	- 6	A
I_{CP}	*Collector Current (Pulse)	- 10	A
I_B	Base Current	- 2	A
P_C	Collector Dissipation (T_C=25°C)	65	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 65 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
V_{CEO}(sus)	* Collector-Emitter Sustaining Voltage					
	: BD244	I_C = - 30mA, I_B = 0	- 45			V
	: BD244A		- 60			V
	: BD244B		- 80			V
	: BD244C		- 100			V
I_{CEO}	Collector Cut-off Current : BD244/244A	V_{CE} = - 30V, I_B = 0			- 0.7	mA
	: BD244B/244C	V_{CE} = - 60V, I_B = 0			- 0.7	mA
I_{CES}	Collector Cut-off Current : BD244	V_{CE} = - 45V, V_{BE} = 0			- 0.4	mA
	: BD244A	V_{CE} = - 60V, V_{BE} = 0			- 0.4	mA
	: BD244B	V_{CE} = - 80V, V_{BE} = 0			- 0.4	mA
	: BD244C	V_{CE} = - 100V, V_{BE} = 0			- 0.4	mA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 5V, I_C = 0			- 1	mA
h_{FE}	* DC Current Gain	V_{CE} = - 4V, I_C = - 0.3A	30			
		V_{CE} = - 4V, I_C = - 3A	15			
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = - 6A, I_B = - 1A			- 1.5	V
V_{BE}(on)	* Base-Emitter ON Voltage	V_{CE} = - 4V, I_C = - 6A			- 2	V

* Pulse Test: PW =300μs, duty Cycle =2% Pulsed

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Typical Characteristics

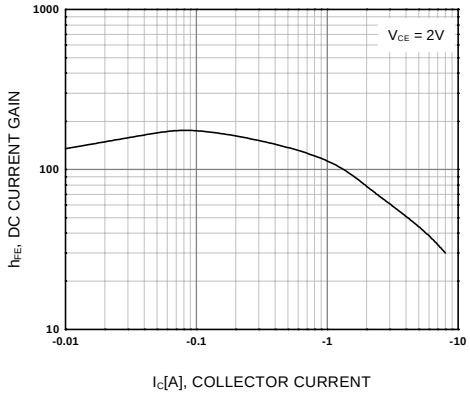

Figure 1. DC current Gain

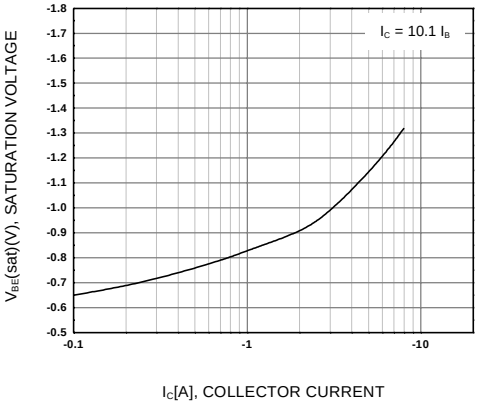

Figure 2. Base-Emitter Saturation Voltage

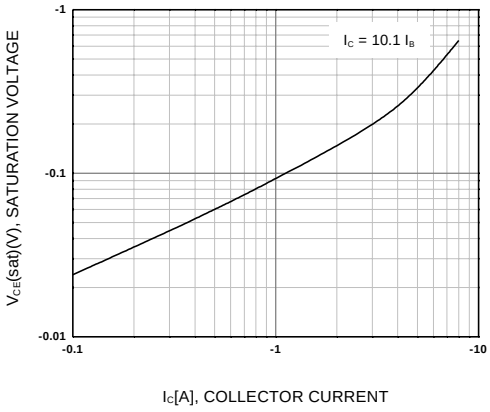

Figure 3. Collector-Emitter Saturation Voltage

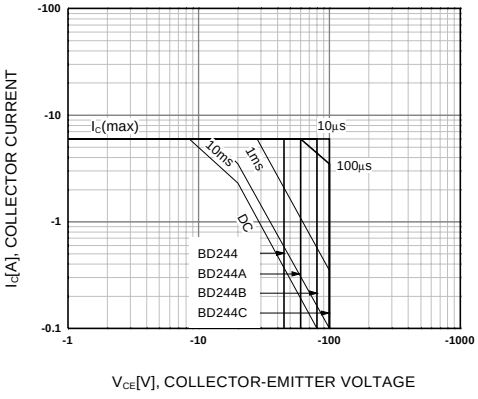

Figure 4. Safe Operating Area

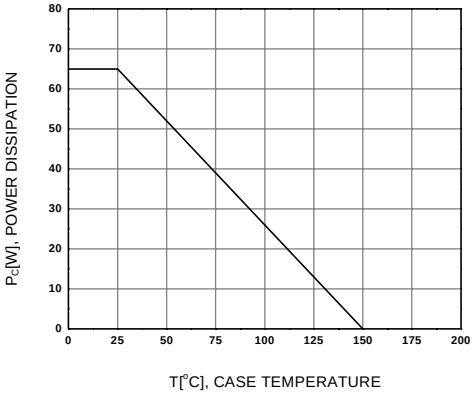

Figure 5. Power Derating

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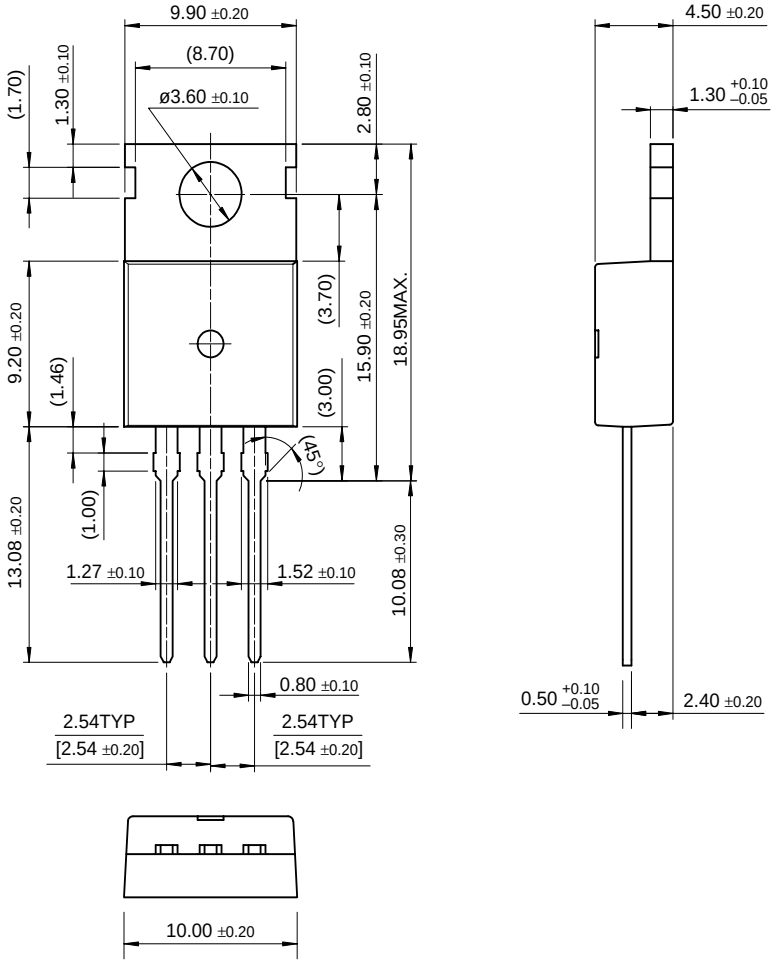
Package Demensions

TO-220



Dimensions in Millimeters

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