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### **BD244/A/B/C**

# **Medium Power Linear and Switching Applications**

• Complement to BD243, BD243A, BD243B and BD243C respectively



1.Base 2.Collector 3.Emitter

### **PNP Epitaxial Silicon Transistor**

### Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage		
	: BD244	- 45	V
	: BD244A	- 60	V
	: BD244B	- 80	V
	: BD244C	- 100	V
V <sub>CEO</sub>	Collector-Emitter Voltage		
	: BD244	- 45	V
	: BD244A	- 60	V
	: BD244B	- 80	V
	: BD244C	- 100	V
V <sub>EBO</sub>	Emitter-Base Voltage	- 5	V
I <sub>C</sub>	Collector Current (DC)	- 6	Α
I <sub>CP</sub>	*Collector Current (Pulse)	- 10	Α
I <sub>B</sub>	Base Current	- 2	Α
P <sub>C</sub>	Collector Dissipation (T <sub>C</sub> =25°C)	65	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 65 ~ 150	°C

### **Electrical Characteristics** $T_C=25$ °C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
V <sub>CEO</sub> (sus)	* Collector-Emitter Sustaining Voltage					
	: BD244	$I_{C} = -30 \text{mA}, I_{B} = 0$	- 45			V
	: BD244A		- 60			V
	: BD244B		- 80			V
	: BD244C		- 100			V
I <sub>CEO</sub>	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 <sub>CES</sub>	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 <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB} = -5V, I_{C} = 0$			- 1	mA
h <sub>FE</sub>	* DC Current Gain	$V_{CF} = -4V, I_{C} = -0.3A$	30			
		$V_{CE} = -4V, I_{C} = -3A$	15			
V <sub>CE</sub> (sat)	* Collector-Emitter Saturation Voltage	$I_C = -6A, I_B = -1A$			- 1.5	V
V <sub>BE</sub> (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**

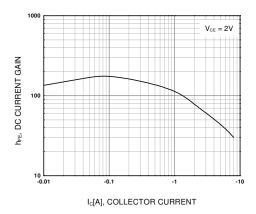


Figure 1. DC current Gain

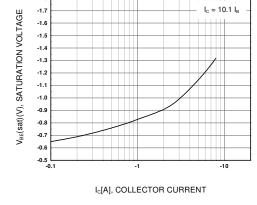


Figure 2. Base-Emitter Saturation Voltage

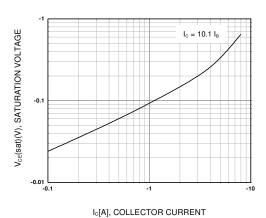


Figure 3. Collector-Emitter Saturation Voltage

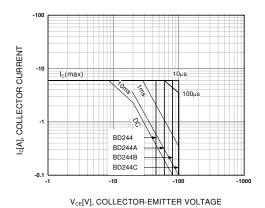


Figure 4. Safe Operating Area

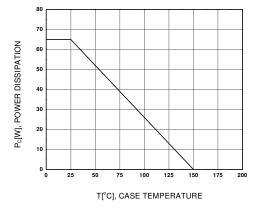
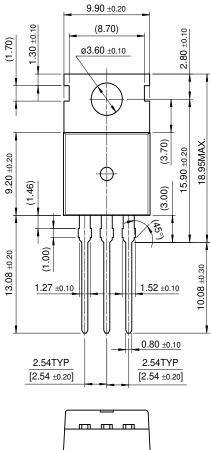


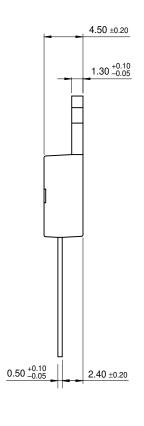
Figure 5. Power Derating

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## **Package Demensions**

## TO-220





10.00 ±0.20

Dimensions in Millimeters

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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