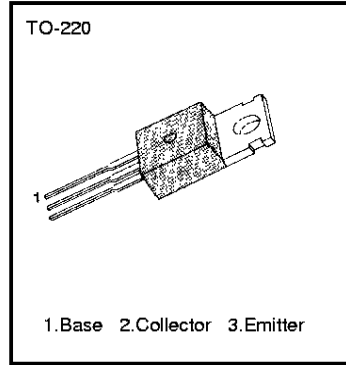


**MEDIUM POWER LINEAR AND SWITCHING APPLICATIONS**

- Complement to BD244, BD244A, BD244B and BD244C respectively

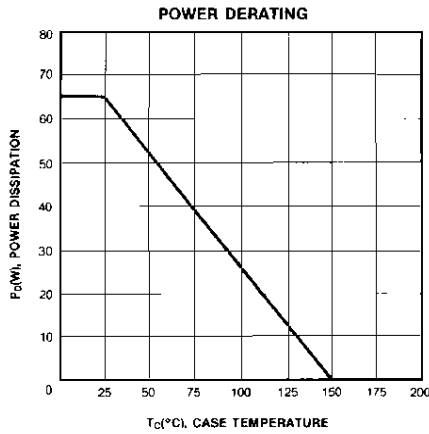
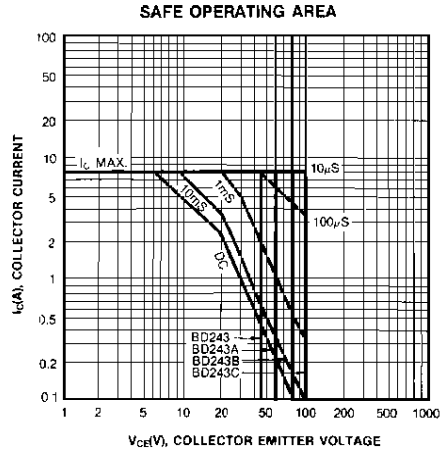
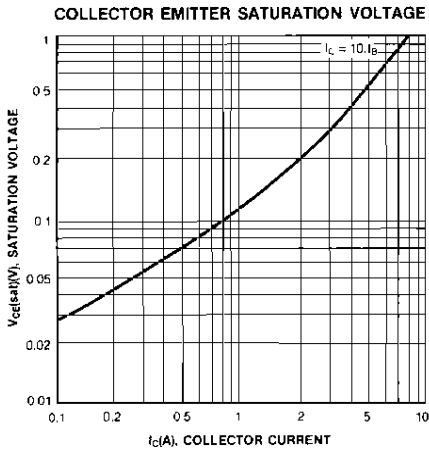
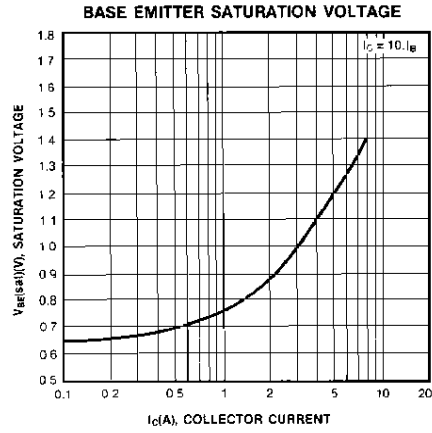
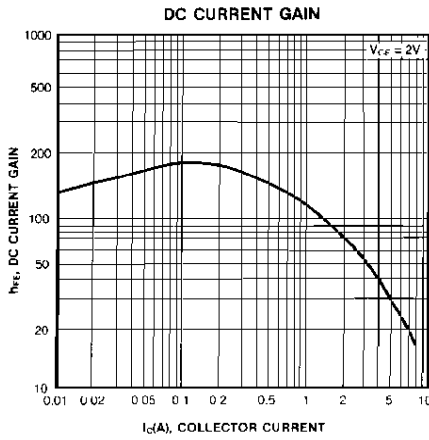
**ABSOLUTE MAXIMUM RATINGS**

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage : BD243	$V_{CE0}$	45	V
: BD243A		60	V
: BD243B		80	V
: BD243C		100	V
Collector Emitter Voltage : BD243	$V_{CE0}$	45	V
: BD243A		60	V
: BD243B		80	V
: BD243C		100	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current (DC)	$I_C$	6	A
Collector Current (Pulse)	$I_C$	10	A
Base Current	$I_B$	2	A
Collector Dissipation ( $T_C=25^\circ\text{C}$ )	$P_C$	65	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 ~ 150	$^\circ\text{C}$


**ELECTRICAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$ )**

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
* Collector Emitter Sustaining Voltage : BD243	$V_{CE0}(\text{sus})$	$I_C=30\text{mA}, I_B=0$	45			V
: BD243A			60			V
: BD243B			80			V
: BD243C			100			V
Collector Cutoff Current : BD243/243A	$I_{CEO}$	$V_{CE} = 30\text{V}, I_B = 0$			0.7	mA
: BD243B/243C		$V_{CE} = 60\text{V}, I_B = 0$			0.7	mA
Collector Cutoff Current : BD243	$I_{CES}$	$V_{CE} = 45\text{V}, V_{BE} = 0$			0.4	mA
: BD243A		$V_{CE} = 60\text{V}, V_{BE} = 0$			0.4	mA
: BD243B		$V_{CE} = 80\text{V}, V_{BE} = 0$			0.4	mA
: BD243C		$V_{CE} = 100\text{V}, V_{BE} = 0$			0.4	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$			1	mA
*DC Current Gain	$h_{FE}$	$V_{CE} = 4\text{V}, I_C = 0.3\text{A}$	30			
		$V_{CE} = 4\text{V}, I_C = 3\text{A}$	15			
*Collector Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = 6\text{A}, I_B = 1\text{A}$			1.5	V
*Base Emitter On Voltage	$V_{BE}(\text{on})$	$V_{CE} = 4\text{V}, I_C = 6\text{A}$			2	V

\* Pulse Test :  $PW=300\mu\text{s}$ , duty Cycle < 20% Pulsed



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E <sup>2</sup> CMOS™	PowerTrench™
FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FAST <sub>r</sub> ™	SuperSOT™-6
GTO™	SuperSOT™-8
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## PRODUCT STATUS DEFINITIONS

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