

Silicon PNP Power Transistor

BD244/A/B/C

DESCRIPTION

- DC Current Gain $-h_{FE} = 30(\text{Min}) @ I_C = -0.3A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEQ(SUS)} = -45V(\text{Min})$ - BD243; $-60V(\text{Min})$ - BD243A
 $-80V(\text{Min})$ - BD243B; $-100V(\text{Min})$ - BD243C
- Complement to Type BD243/A/B/C

APPLICATIONS

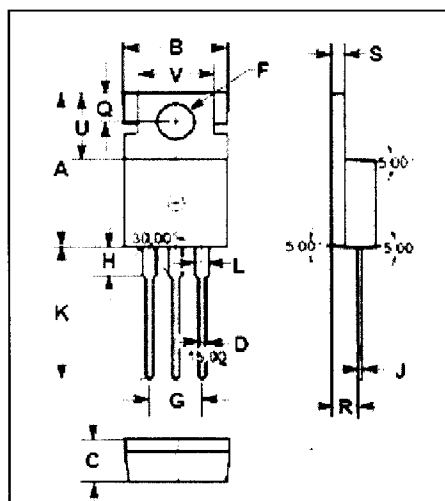
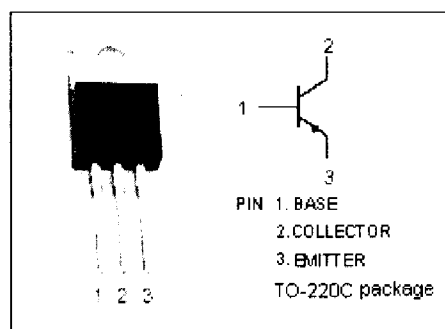
- Designed for use in general purpose power amplifier and switching applications

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	BD244	-45
		BD244A	-60
		BD244B	-80
		BD244C	-100
V_{CEO}	Collector-Emitter Voltage	BD244	-45
		BD244A	-60
		BD244B	-80
		BD244C	-100
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-6.0	A
I_{CM}	Collector Current-Peak	-10	A
I_B	Base Current	-2.0	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	65	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	1.92	$^\circ\text{C/W}$



DIM	mm	
	MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT	
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	BD244	$I_C = -30\text{mA}; I_B = 0$	-45	V	
		BD244A		-60		
		BD244B		-80		
		BD244C		-100		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -6\text{A}; I_B = -1\text{A}$		-1.5	V	
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -6\text{A}; V_{CE} = -4\text{V}$		-2.0	V	
I_{CES}	Collector Cutoff Current	BD244		-0.4	mA	
		BD244A				$V_{CE} = -45\text{V}; V_{BE} = 0$
		BD244B				$V_{CE} = -60\text{V}; V_{BE} = 0$
		BD244C				$V_{CE} = -80\text{V}; V_{BE} = 0$
I_{CEO}	Collector Cutoff Current	BD244/A		-0.7	mA	
		BD244B/C				$V_{CE} = -100\text{V}; V_{BE} = 0$
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$		-1.0	mA	
h_{FE-1}	DC Current Gain	$I_C = -0.3\text{A}; V_{CE} = -4\text{V}$	30			
h_{FE-2}	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -4\text{V}$	15			
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -10\text{V}; f_{test} = 1.0\text{MHz}$	3.0		MHz	