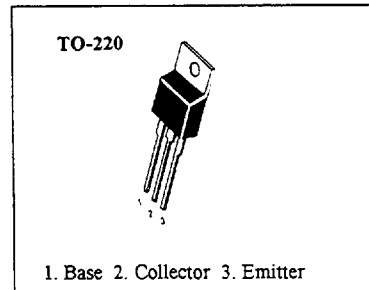


## MEDIUM POWER LINEAR SWITCHING APPLICATIONS

- Collector current 1.8A
- Collector dissipation  $P_c = 100W$  ( $T_c = 25\text{ }^\circ\text{C}$ )

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

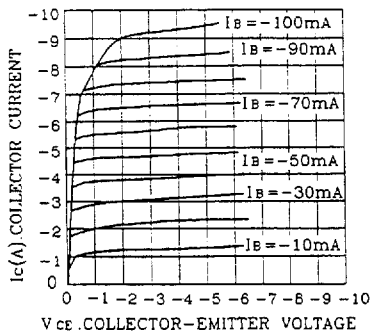
Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-20	V
Collector-Emitter Voltage	$V_{CE0}$	-13	V
Emitter-Base Voltage	$V_{EB0}$	-7	V
Collector Current	$I_c$	-1.8	A
Collector Dissipation	$P_c$	100	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



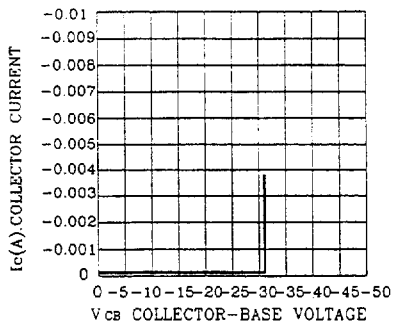
### ELECTRICAL CHARACTERISTICS ( $T_a = 25\text{ }^\circ\text{C}$ )

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$BV_{CB0}$	$I_c = -1\text{mA}, I_E = 0$	-20			V
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	$I_c = -10\text{mA}, I_B = 0$	-13			V
Emitter-Base Breakdown Voltage	$BV_{EB0}$	$I_E = -1\text{mA}, I_C = 0$	-7			V
Collector Cutoff Current	$I_{CB0}$	$V_{CB} = -15\text{V}, I_E = 0$			-100	$\mu\text{A}$
Emitter Cutoff Current	$I_{EB0}$	$V_{EB} = -3\text{V}, I_C = 0$			-100	$\mu\text{A}$
DC Current Gain	$h_{FE1}$	$V_{CE} = -3\text{V}, I_C = -10\text{A}$	120			
	$h_{FE2}$	$V_{CE} = -3\text{V}, I_C = -15\text{A}$	90			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -10\text{A}, I_B = -1\text{A}$			-0.7	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = -10\text{A}, V_{CE} = -4\text{V}$			-1.5	V

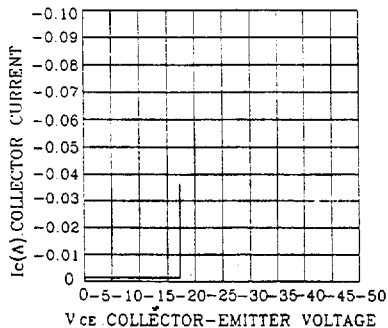
**DC CURRENT GAIN**



**COLLECTOR-BASE BREAKDOWN VOLTAGE**



**COLLECTOR-EMITTER BREAKDOWN VOLTAGE**



**COLLECTOR-EMITTER SATURATION VOLTAGE**

