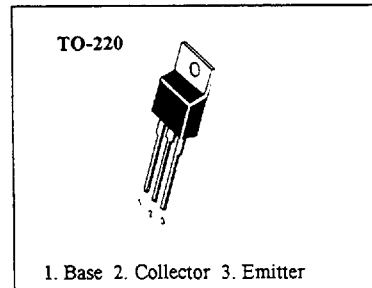


MEDIUM POWER LINEAR SWITCHING APPLICATIONS

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

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

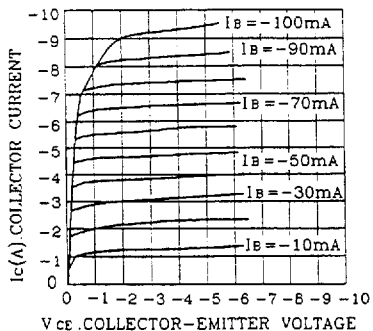
Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-20	V
Collector-Emitter Voltage	V_{CEO}	-13	V
Emitter-Base Voltage	V_{EBO}	-7	V
Collector Current	I_c	-1.8	A
Collector Dissipation	P_c	100	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ\text{C}$



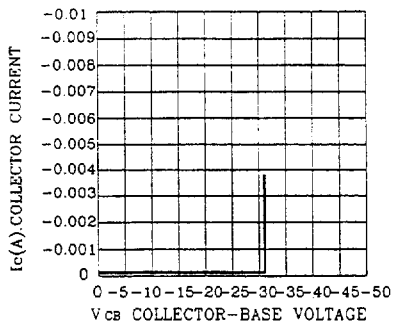
ELECTRICAL CHARACTERISTICS ($T_a = 25\text{ }^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_c = -1\text{mA}, I_E = 0$	-20			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_c = -10\text{mA}, I_B = 0$	-13			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -1\text{mA}, I_C = 0$	-7			V
Collector Cutoff Current	I_{CBO}	$V_{CB} = -15\text{V}, I_E = 0$			-100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -3\text{V}, I_C = 0$			-100	μA
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

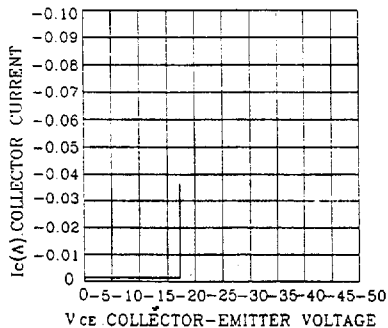
DC CURRENT GAIN



COLLECTOR-BASE BREAKDOWN VOLTAGE



COLLECTOR-EMITTER BREAKDOWN VOLTAGE



COLLECTOR-EMITTER SATURATION VOLTAGE

