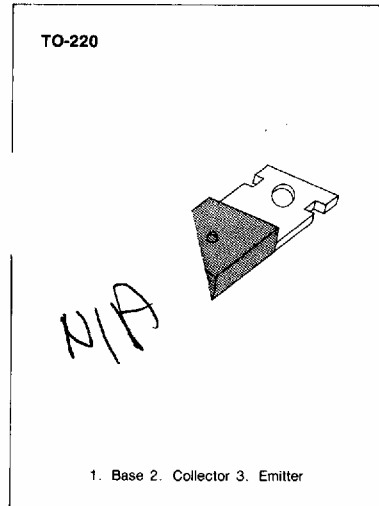


**GENERAL PURPOSE AND SWITCHING
APPLICATIONS
DC CURRENT GAIN SPECIFIED
TO 10 AMPERES**

High Current Gain-Bandwidth Product ($f_T = 2\text{MHz (MIN)}$)

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	70	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	10	A
Base Current	I_B	6	A
Collector Dissipation ($T_C = 25^\circ\text{C}$)	P_C	75	W
Collector Dissipation ($T_a = 25^\circ\text{C}$)	P_C	0.6	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$



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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Emitter Sustaining Voltage	$V_{CE(sus)}$	$I_C = 200\text{mA}, I_B = 0$	60		V
Collector Cutoff Current	I_{CEO}	$V_{CE} = 30\text{V}, I_B = 0$		700	μA
Collector Cutoff Current	I_{CEX}	$V_{CE} = 70\text{V}, V_{BE(off)} = -1.5\text{V}$ $V_{CE} = 70\text{V}, V_{BE(off)} = -1.5\text{V}$ $T_C = 150^\circ\text{C}$		1 5	 mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$		5	mA
*DC Current Gain	h_{FE}	$V_{CE} = 4\text{V}, I_C = 4\text{A}$ $V_{CE} = 4\text{V}, I_C = 10\text{A}$	20 5	100	
*Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4\text{A}, I_B = 0.4\text{A}$ $I_C = 10\text{A}, I_B = 3.3\text{A}$		1.1 8	 V
*Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 4\text{V}, I_C = 4\text{A}$		1.8	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10\text{V}, I_C = 500\text{mA}, f = 500\text{KHz}$	2		MHz

* Pulse test: $PW \leq 300\mu\text{s}$, duty cycle $\leq 2\%$ Pulse

