

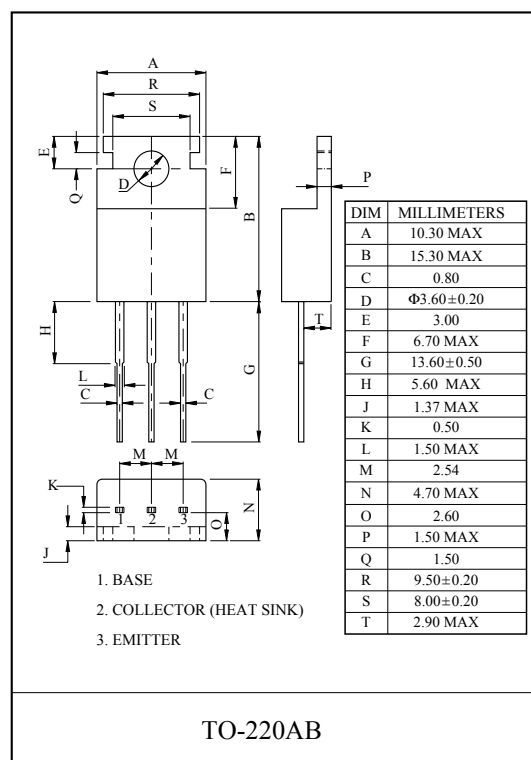
SWITCHING APPLICATIONS.
HAMMER DRIVER, PULSE MOTOR DRIVER
APPLICATIONS.

FEATURES

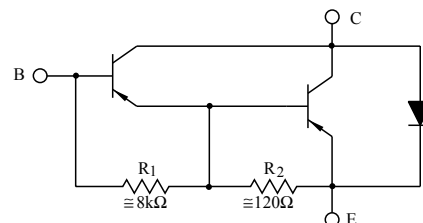
- High DC Current Gain : $h_{FE}=1000(\text{Min.})$ at $V_{CE}=-3V$, $I_C=-3A$.
- High Collector Breakdown Voltage : $V_{CEO}=-120V(\text{Min.})$

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-120	V
Collector-Emitter Voltage		V_{CEO}	-120	V
Emitter-Base Voltage		V_{EB0}	-5	V
Collector Current	DC	I_C	-5	A
	Pules	I_{CP}	-8	
Base Current		I_B	-0.12	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)		P_C	65	W
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ\text{C}$



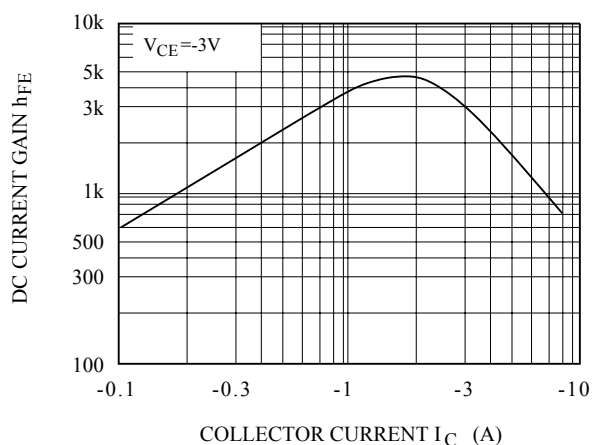
EQUIVALENT CIRCUIT



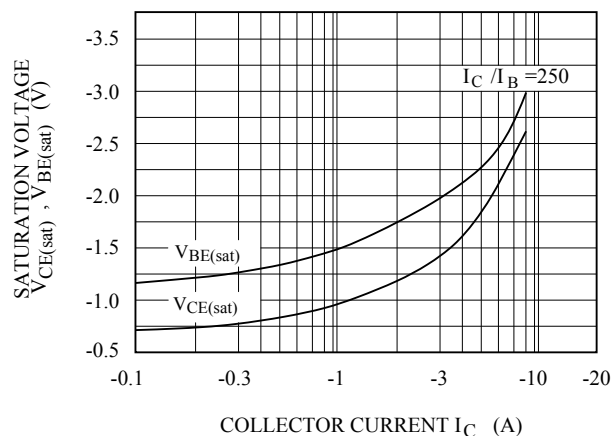
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-100V$, $I_E=0$	-	-	-1	mA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V$, $I_C=0$	-	-	-2	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-10mA$, $I_B=0$	-120	-	-	V
DC Current Gain	$h_{FE}(1)$	$V_{CE}=-3V$, $I_C=-0.5A$	1000	-	-	
	$h_{FE}(2)$	$V_{CE}=-3V$, $I_C=-3A$	1000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}(1)$	$I_C=-3A$, $I_B=-12mA$	-	-	-2	V
	$V_{CE(sat)}(2)$	$I_C=-5A$, $I_B=-20mA$	-	-	-4	
Base-Emitter Voltage	V_{BE}	$V_{CE}=-3V$, $I_C=-3A$	-	-	-2.5	V
Output Capacitance	C_{ob}	$V_{CB}=-10V$, $I_E=0$, $f=1MHz$	-	-	300	pF

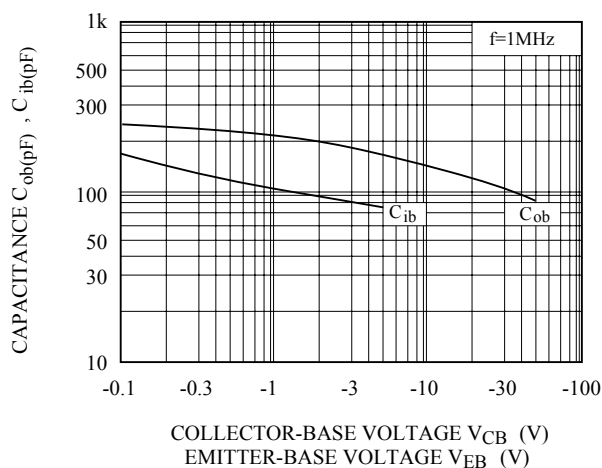
$h_{FE} - I_C$



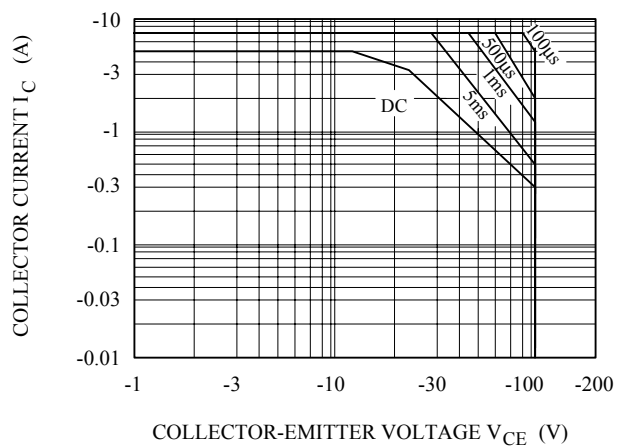
$V_{CE(sat)}, V_{BE(sat)}, -I_C$



$C_{ob}, C_{ib} - V_{CB}, V_{EB}$



SAFE OPERATING AREA



$P_C - T_a$

