

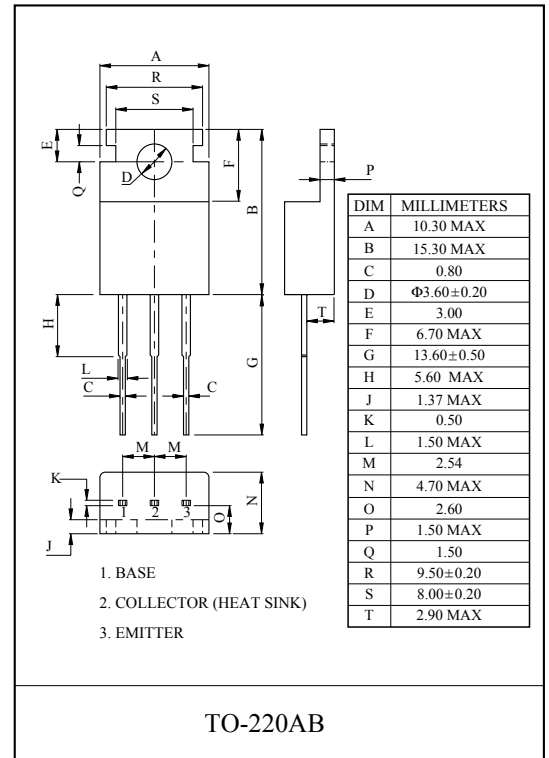
GENERAL PURPOSE APPLICATION.

FEATURES

- Low Saturation Voltage
: $V_{CE(sat)}=1.0V(\text{Max.})$ at $I_C=2A, I_B=0.2A$
- Complementary to KTB988.

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	60	V
Collector-Emitter Voltage		V_{CEO}	60	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current		I_C	3	A
Base Current		I_B	0.5	A
Collector Power Dissipation	$T_a=25^\circ\text{C}$	P_C	2.0	W
	$T_c=25^\circ\text{C}$		30	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ\text{C}$

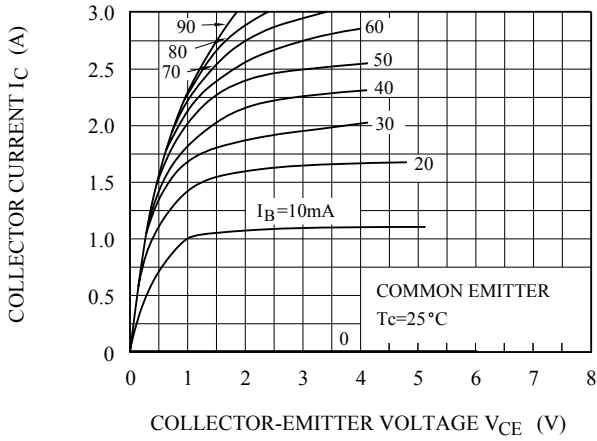


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

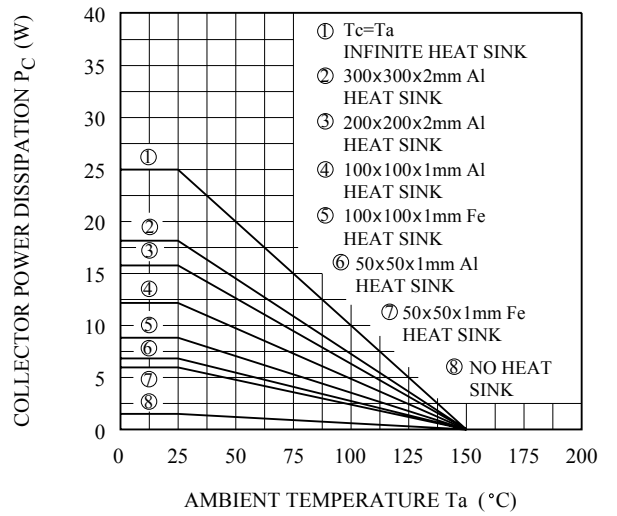
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=60V, I_E=0$	-	-	100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	100	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	60	-	-	V
DC Current Gain		$h_{FE}(\text{Note})$	$V_{CE}=5V, I_C=0.5A$	60	-	300	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=2A, I_B=0.2A$	-	0.25	1.0	V
Base-Emitter Voltage		V_{BE}	$V_{CE}=5V, I_C=0.5A$	-	0.7	1.0	V
Transition Frequency		f_T	$V_{CE}=5V, I_C=0.5A$	-	3.0	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	35	-	pF
Switching Time	Turn-on Time	t_{on}	<p>$I_{B1} = -I_{B2} = 0.2A$ DUTY CYCLE $\leq 1\%$</p>	-	0.65	-	μS
	Storage Time	t_{stg}		-	1.3	-	
	Fall Time	t_f		-	0.65	-	

Note : h_{FE} Classification O:60 ~ 120 , Y:100 ~ 200 , GR:150 ~ 300

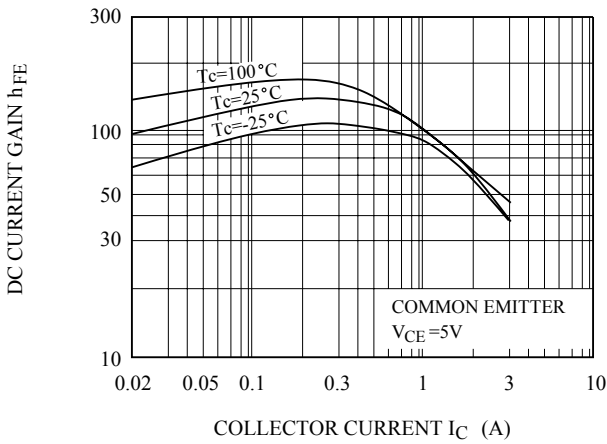
$I_C - V_{CE}$



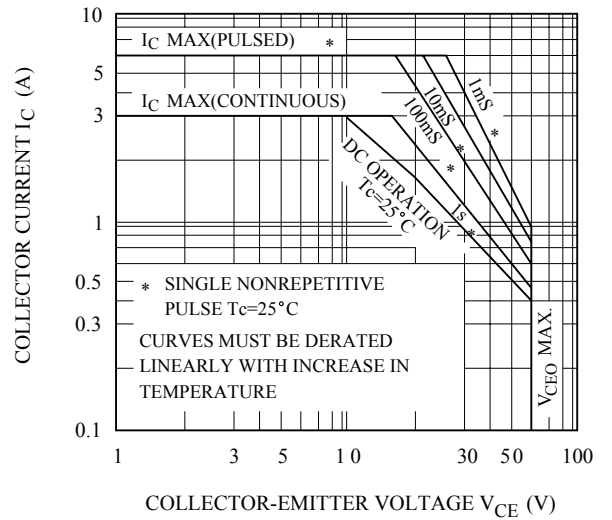
$P_c - T_a$



$h_{FE} - I_C$



SAFE OPERATING AREA



$V_{CE(sat)} - I_C$

