

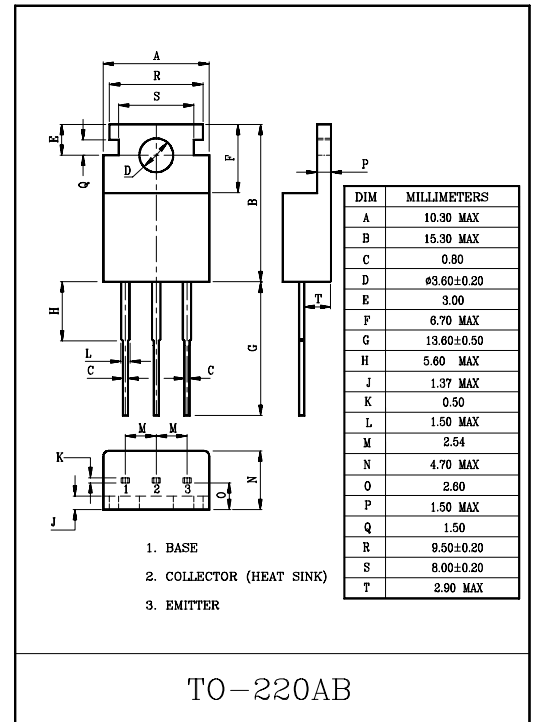
### GENERAL PURPOSE APPLICATION.

### FEATURES

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

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

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	$P_C$	$T_a=25^\circ\text{C}$	2	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	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	100	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	60	-	-	V
DC current Gain	$h_{FE}$	$V_{CE}=5V, I_C=0.5A$ (Note)	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	$t_{on}$	-	0.65	-	$\mu\text{S}$
	Storage Time	$t_{stg}$	-	1.3	-	
	Fall Time	$t_f$	-	0.65	-	

$I_{B1} = -I_{B2} = 0.2A$   
DUTY CYCLE  $\leq 1\%$   
 $V_{CC} = 30V$

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

