

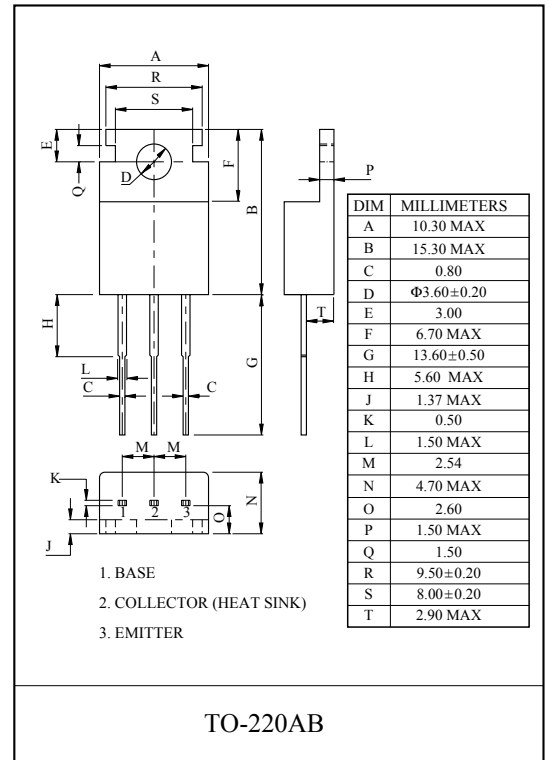
### GENERAL PURPOSE APPLICATION.

### FEATURES

- High Breakdown Voltage :  $V_{CE0}=-100V$ .
- Low Collector-Emitter Saturation Voltage.  
:  $V_{CE(sat)}=-2.0V(\text{Max.})$
- Complementary to KTC2018.

### MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-100	V
Collector-Emitter Voltage	$V_{CEO}$	-100	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-5	A
Emitter Current	$I_E$	5	A
Base Current	$I_B$	-0.5	A
Collector Power Dissipation (Tc=25°C)	$P_C$	40	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-100V, I_E=0$	-	-	-100	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$	-	-	-1.0	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-50mA, I_B=0$	-100	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10mA, I_C=0$	-5.0	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=-5V, I_C=-1A$	70	-	240	
	$h_{FE(2)}$	$V_{CE}=-5V, I_C=-4A$	20	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-4A, I_B=-0.4A$	-	-	-2.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=-5V, I_C=-4A$	-	-	-1.5	V
Transition Frequency	$f_T$	$V_{CE}=-5V, I_C=-1A$	-	30	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1MHz$	-	90	-	pF

Note :  $h_{FE(1)}$  Classification O:70 ~ 140 , Y:120 ~ 240

# KTA1038

