

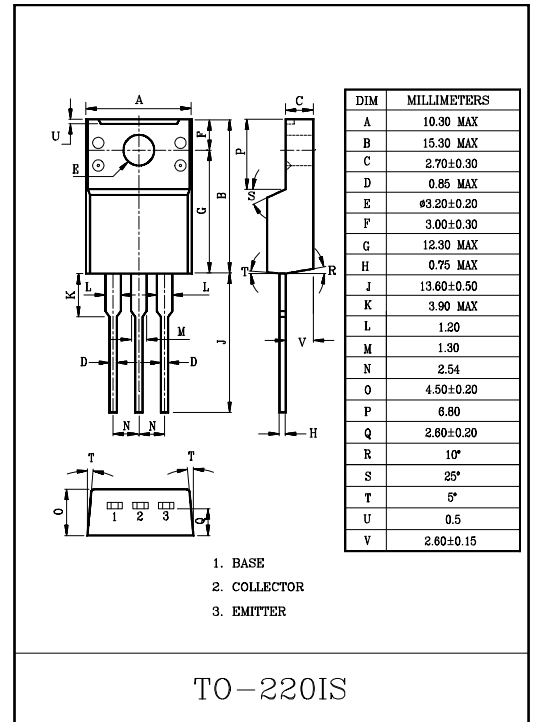
GENERAL PURPOSE APPLICATION.

FEATURES

- Low Saturation Voltage
: $V_{CE(sat)}=1.0V(\text{Max.})$ ($I_C=2A, I_B=0.2A$).
- Complementary to KTA1046.

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_{EB0}	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
		$T_c=25^\circ\text{C}$	25	
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	$h_{FE}(\text{Note})$	$V_{CE}=5V, I_C=0.5A$	100	-	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	$V_{CE}=5V, I_C=0.5A$	-	30	-	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	-	μS
	Storage Time	t_{stg}	-	1.3	-	
	Fall Time	t_f	-	0.65	-	

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

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

