

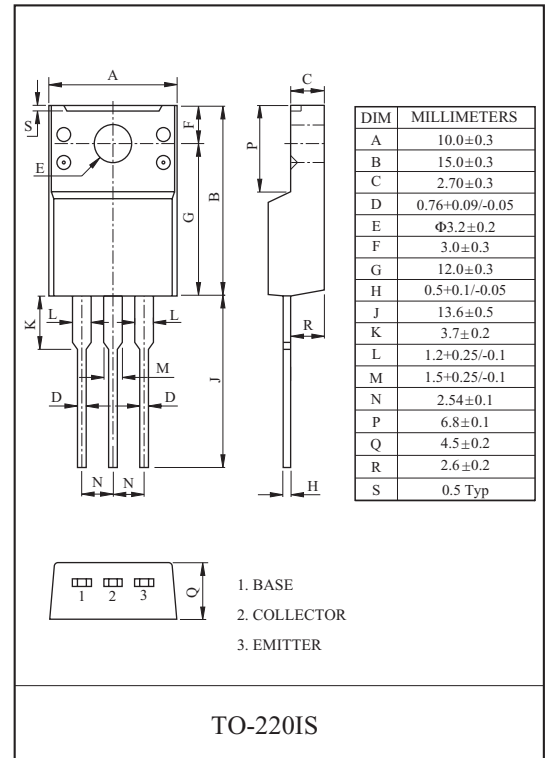
GENERAL PURPOSE APPLICATION.

FEATURES

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

MAXIMUM RATING (Ta=25)

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	Ta=25	P_C	2	W
	Tc=25		20	
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

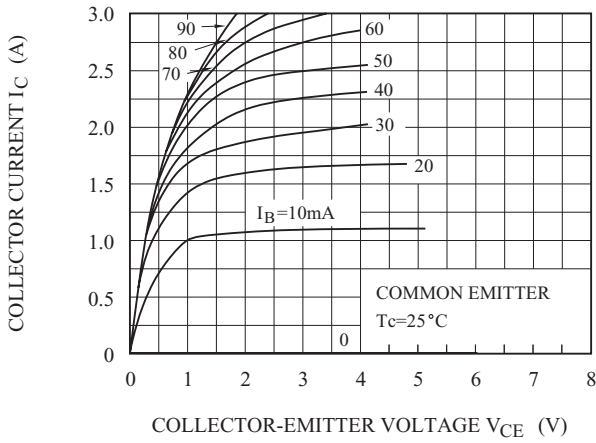


ELECTRICAL CHARACTERISTICS (Ta=25)

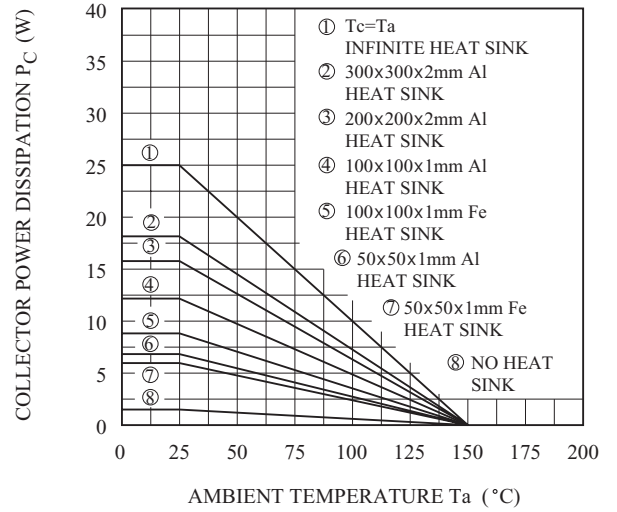
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=60V, I_E=0$	-	-	1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=7V, I_C=0$	-	-	1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	60	-	-	V
DC Current Gain		h_{FE} (Note)	$V_{CE}=5V, I_C=0.5A$	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}	$V_{CB}=10V, I_E=0, f=1MHz$	-	35	-	pF
Switching Time	Turn-on Time	t_{on}	<p>$I_{B1}=I_{B2}=0.2A$ DUTY CYCLE ≤ 1%</p>	-	0.65	-	μs
	Storage Time	t_{stg}		-	1.3	-	
	Fall Time	t_f		-	0.65	-	

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

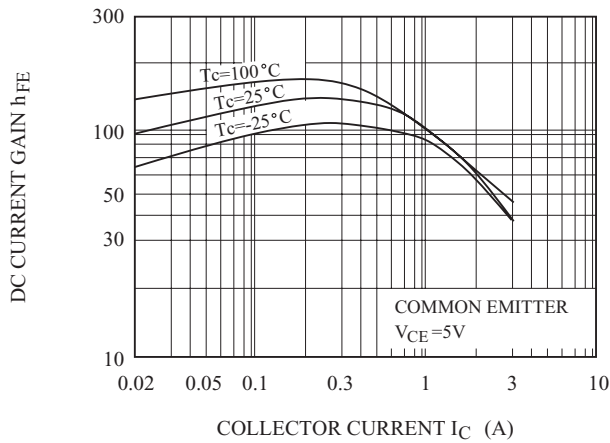
$I_C - V_{CE}$



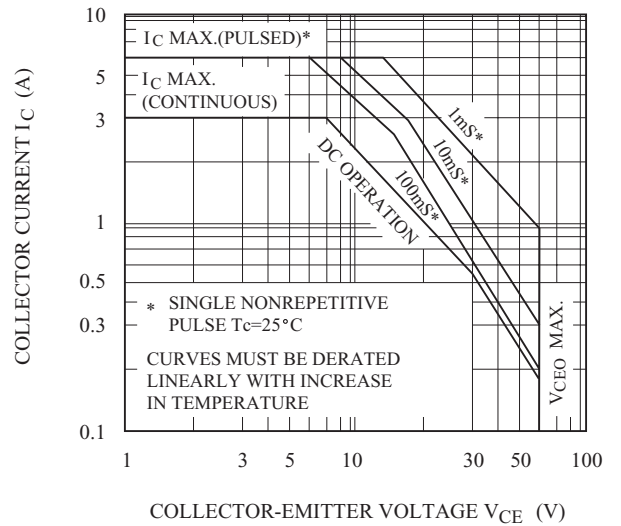
$P_c - T_a$



$h_{FE} - I_C$



SAFE OPERATING AREA



$V_{CE(sat)} - I_C$

