

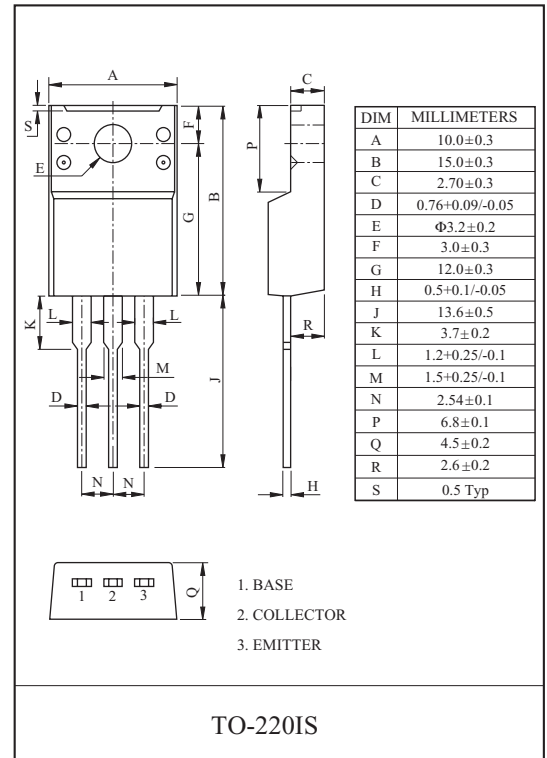
GENERAL PURPOSE APPLICATION.

### 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	

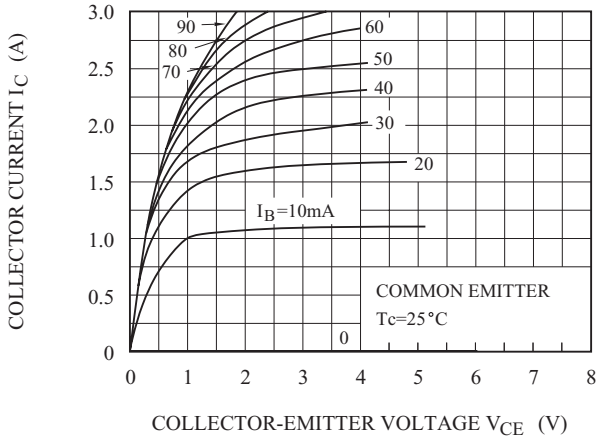


### ELECTRICAL CHARACTERISTICS (Ta=25 )

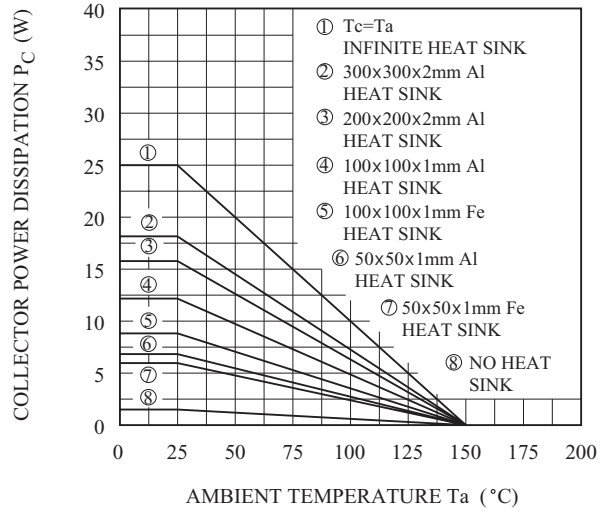
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=60V, I_E=0$	-	-	1	μA
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	1	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	60	-	-	V
DC Current Gain		$h_{FE}$ (Note)	$V_{CE}=5V, I_C=0.5A$	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><math>I_{B1}=I_{B2}=0.2A</math> 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

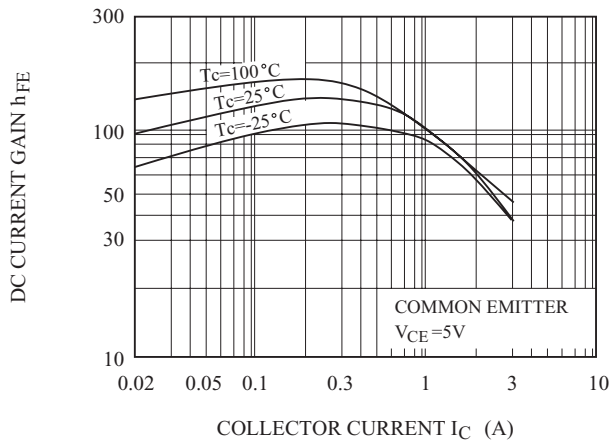
$I_C - V_{CE}$



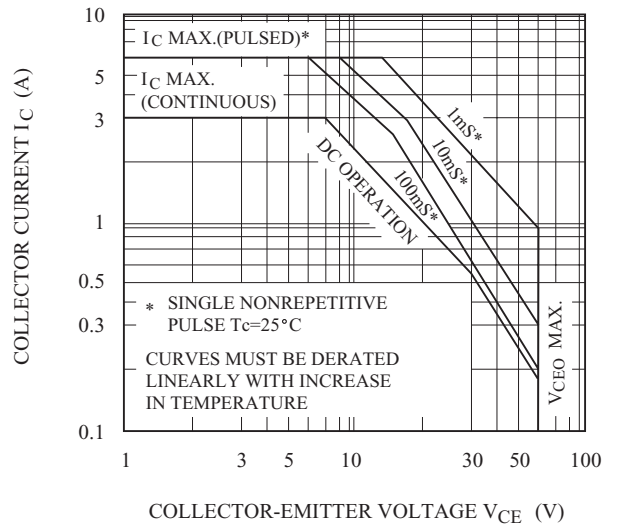
$P_c - T_a$



$h_{FE} - I_C$



SAFE OPERATING AREA



$V_{CE(sat)} - I_C$

