

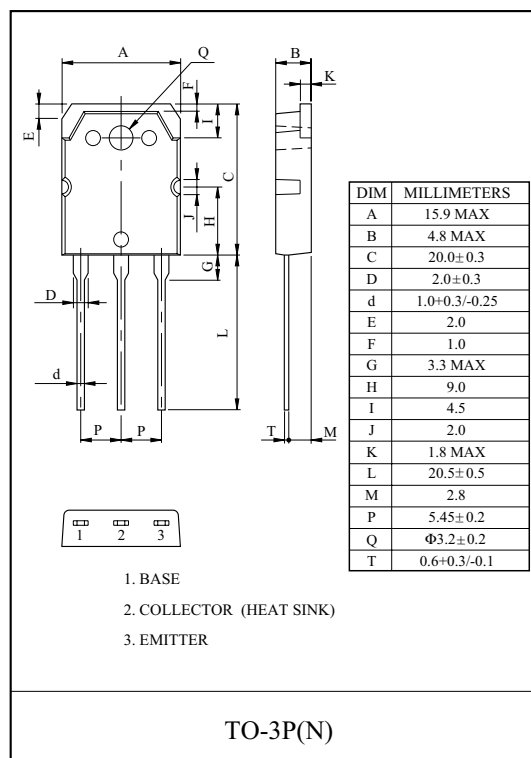
POWER AMPLIFIER APPLICATIONS.

FEATURES

- High Collector Voltage : $V_{CE0}=230V(\text{Min.})$
- Complementary to KTA1962A.
- Recommended for 80W High Fidelity Audio Frequency Amplifier Output Stage.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	230	V
Collector-Emitter Voltage	V_{CEO}	230	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	15	A
Base Current	I_B	1.5	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	130	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$



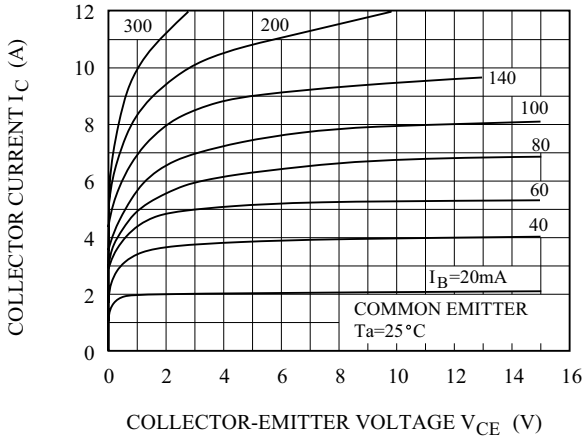
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=230V, I_E=0$	-	-	5.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	230	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=5V, I_C=1A$	55	-	160	
	$h_{FE}(2)$	$V_{CE}=5V, I_C=7A$	35	60	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=8A, I_B=0.8A$	-	0.4	3.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=7A$	-	1.0	1.5	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	-	30	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	200	-	pF

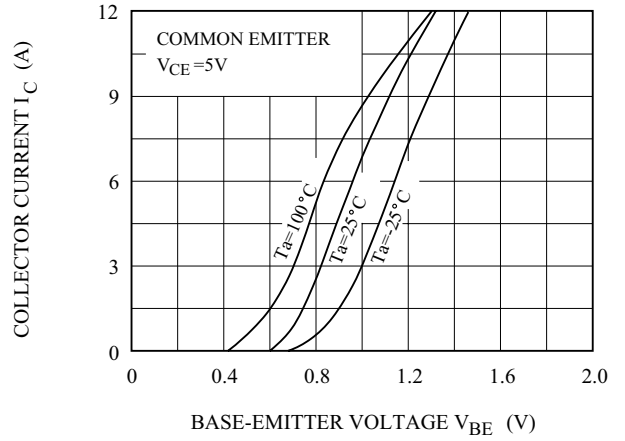
Note : $h_{FE}(1)$ Classification R:55 ~ 110 , O:80 ~ 160

KTC5242A

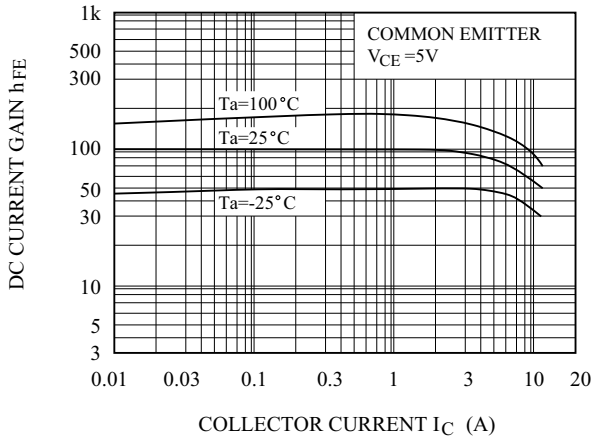
$I_C - V_{CE}$



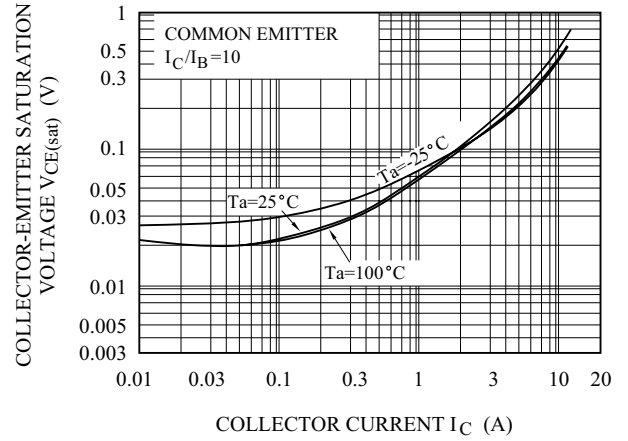
$I_C - V_{BE}$



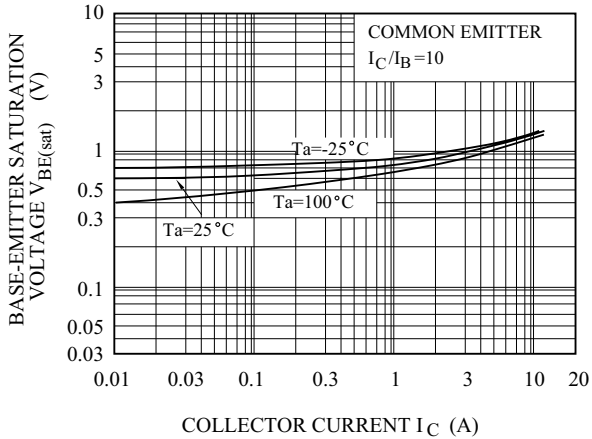
$h_{FE} - I_C$



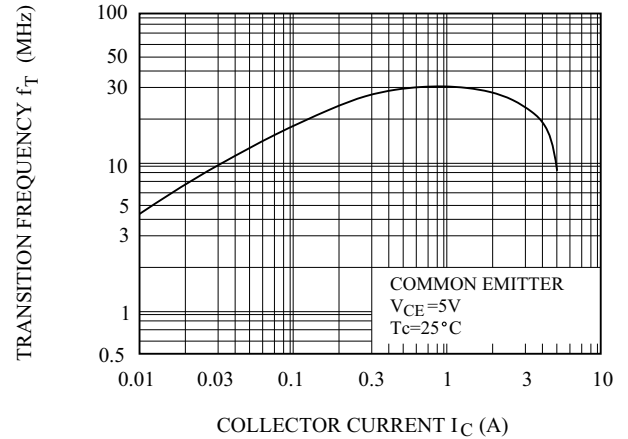
$V_{CE(sat)} - I_C$



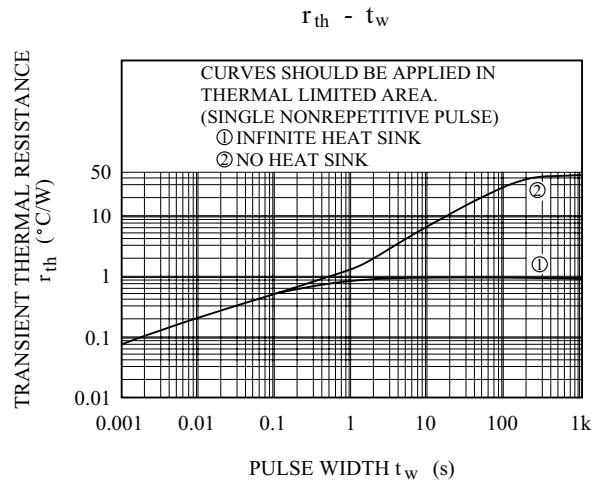
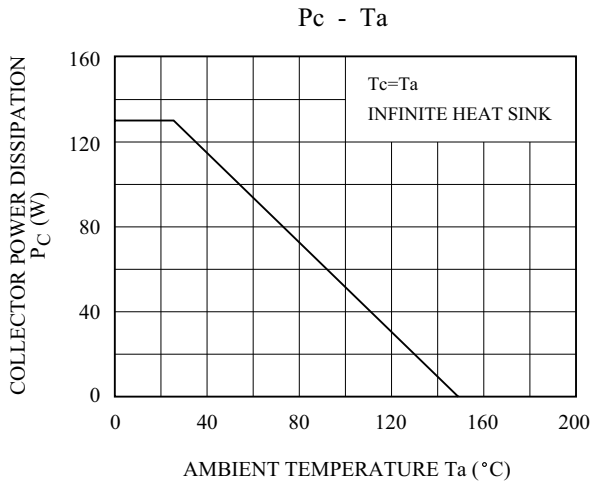
$V_{BE(sat)} - I_C$



$f_T - I_C$



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SAFE OPERATING AREA

