

AUDIO FREQUENCY POWER AMPLIFIER
HIGH FREQUENCY POWER AMPLIFIER

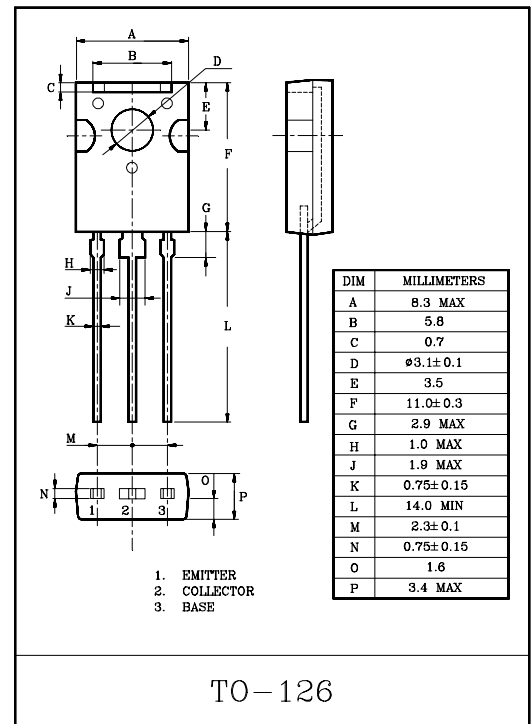
FEATURES

- Complementary to KTC2803.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-120	V
Collector-Emitter Voltage		V_{CEO}	-120	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-1.2	A
	Pulse (Note1)		-2.5	
Base Current		I_B	-0.3	A
Collector Power Dissipation	Ta=25°C	P_C	1.5	W
	Tc=25°C		20	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C

Note 1 : Pulse Width $\leq 10\text{ms}$, Duty Cycle $\leq 50\%$



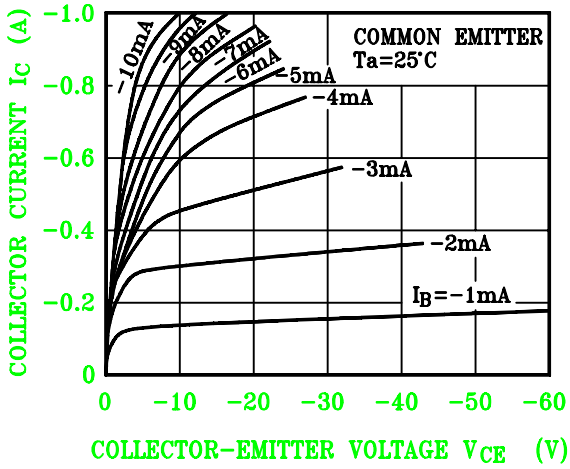
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut of Current	I_{CBO}	$V_{CB} = -50\text{V}, I_E = 0$	-	-	-1	μA
Emitter Cut of Current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$	-	-	-1	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}$	-120	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}$	-120	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}$	-5	-	-	V
DC Current Gain	$h_{FE(1)}$ Note	$V_{CE} = -5\text{V}, I_C = -50\text{mA}$	100	-	320	
	$h_{FE(2)}$	$V_{CE} = -5\text{V}, I_C = -500\text{mA}$	20	-	-	
Gain Bandwidth Product	f_T	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$	-	110	-	MHz
Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$	-	30	-	pF
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-0.15	-0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	-	-0.85	-1.2	V

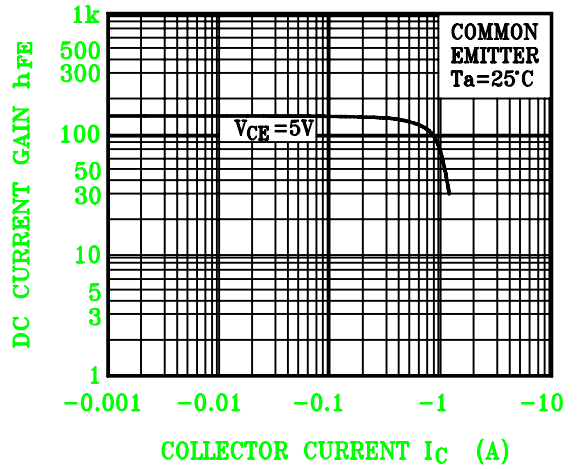
(Note) : $h_{FE(1)}$ Classification Y:100~200, GR:160~320

KTA1704

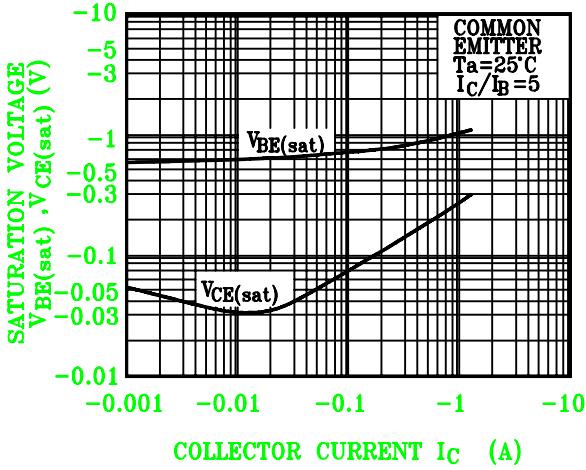
$I_C - V_{CE}$



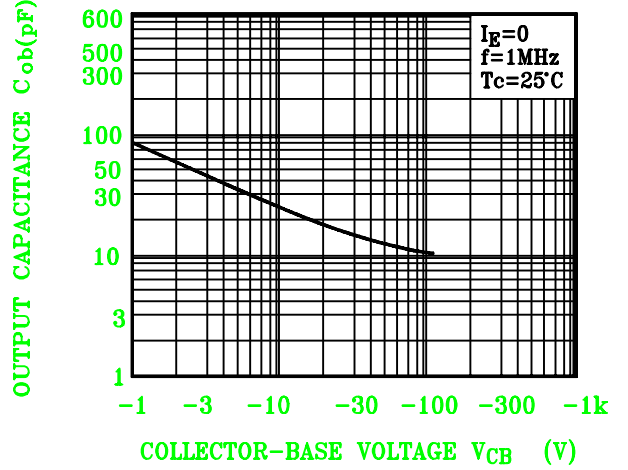
$h_{FE} - I_C$



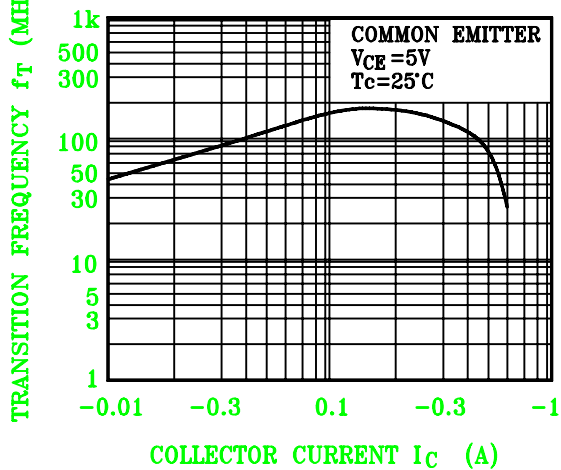
$V_{CE(sat)} - I_C, V_{BE(sat)} - I_C$



$C_{ob} - V_{CB}$



$f_T - I_C$



KTA1704

