

AUDIO FREQUENCY, HIGH FREQUENCY  
POWER AMPLIFIER

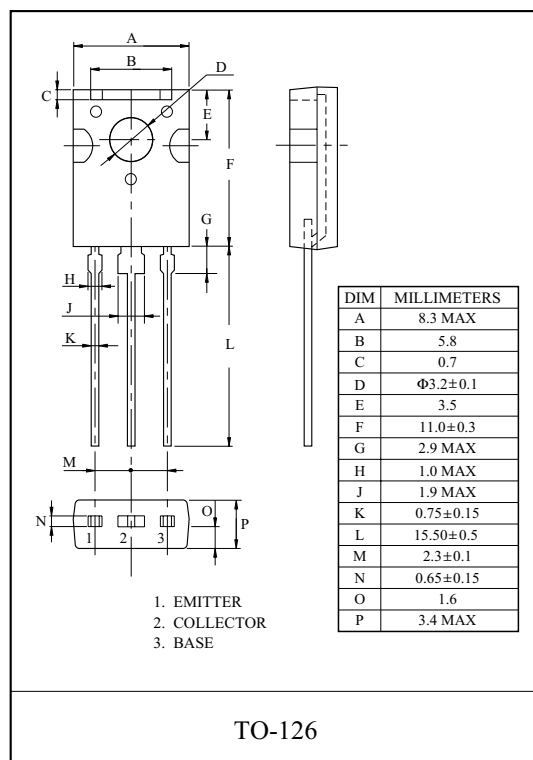
### FEATURES

- Complementary to KTA1704.

### MAXIMUM RATING (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)	$I_{CP}$	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  $\leq 50\%$



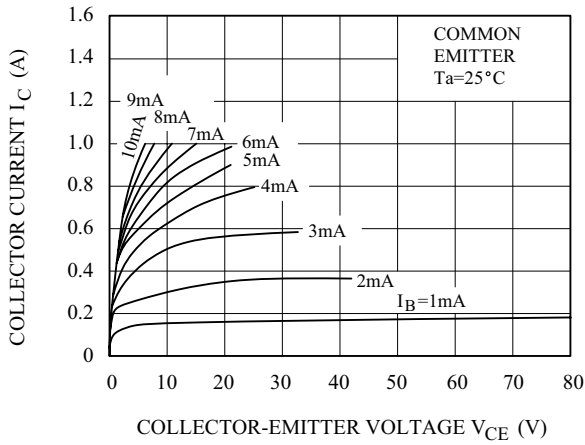
### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut of Current	$I_{CBO}$	$V_{CB}=50\text{V}, I_E=0$	-	-	1	$\mu\text{A}$
Emitter Cut of Current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$	-	-	1	$\mu\text{A}$
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	120	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	120	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	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	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	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

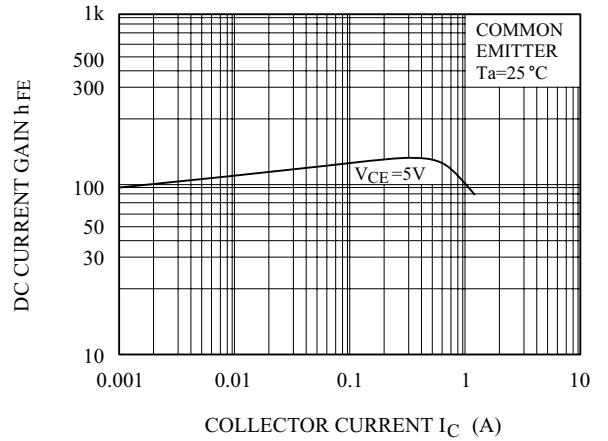
(Note) :  $h_{FE(1)}$  Classification Y:100 ~ 200, GR:160 ~ 320

# KTC2803

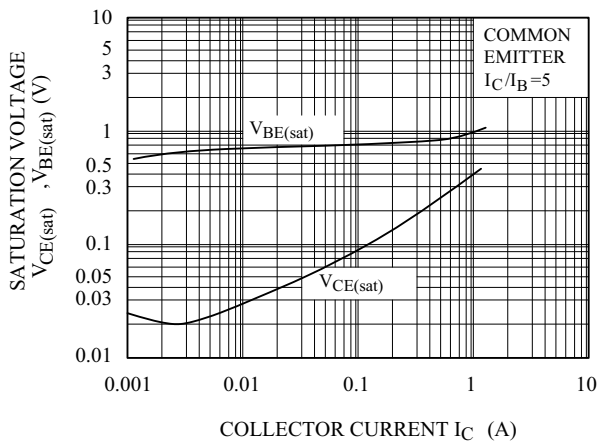
$I_C - V_{CE}$



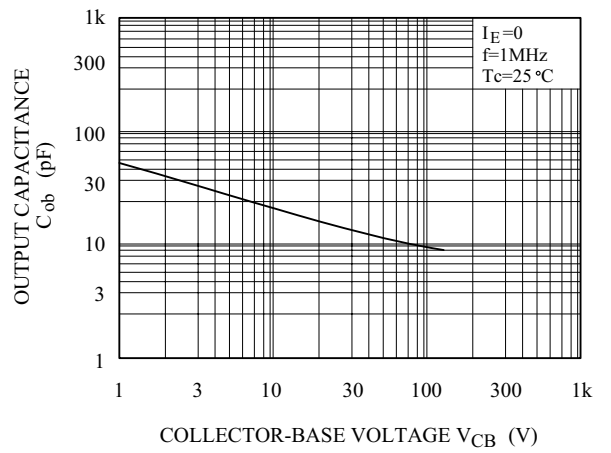
$h_{FE} - I_C$



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



$C_{ob} - V_{CB}$



$f_T - I_C$

