

AUDIO FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING

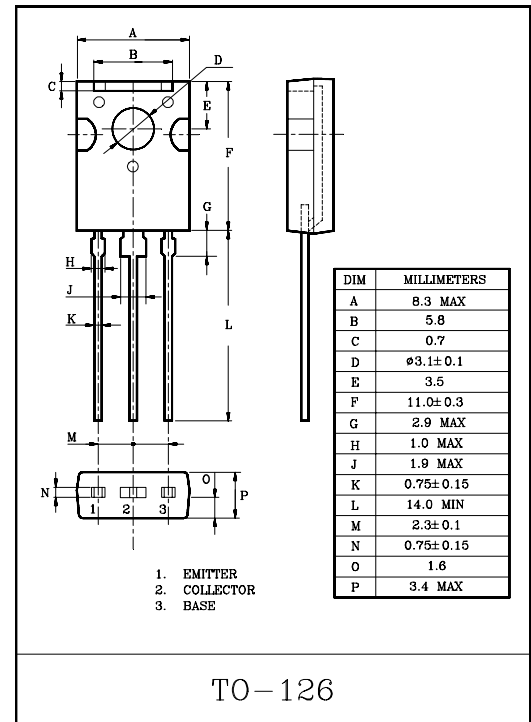
FEATURES

- Complementary to KTD882.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-40	V
Collector-Emitter Voltage		V_{CEO}	-30	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-3	A
	Pulse (Note)		-7	
Base Current (DC)		I_B	-0.6	A
Collector Power Dissipation	Ta=25°C	P_C	1.5	W
	Tc=25°C		10	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

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



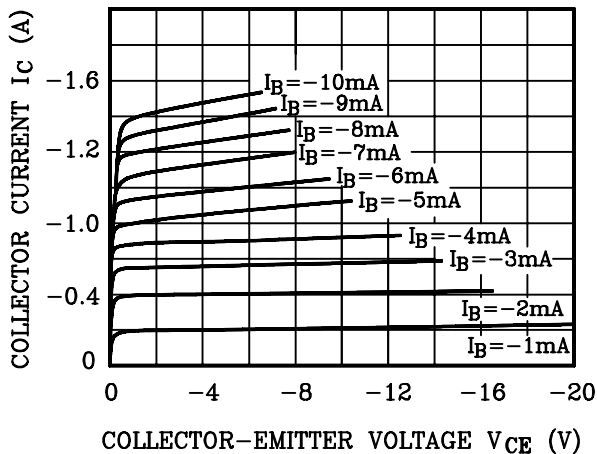
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$	-	-	-1	μA
Emitter-Cut-off Current	I_{EBO}	$V_{EB} = -3V, I_C = 0$	-	-	-1	μA
DC Current Gain *	$h_{FE}(1)$	$V_{CE} = -2V, I_C = -20mA$	30	220	-	
	$h_{FE}(2)$ (Note)	$V_{CE} = -2V, I_C = -1A$	100	160	400	
Collector-Emitter Saturation Voltage *	$V_{CE(sat)}$	$I_C = -2A, I_B = -0.2A$	-	-0.3	-0.5	V
Base-Emitter Saturation Voltage *	$V_{BE(sat)}$	$I_C = -2V, I_B = -0.2A$	-	-1.0	-2.0	V
Current Gain Bandwidth Product	f_T	$V_{CE} = -5V, I_C = -0.1A$	-	80	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	55	-	pF

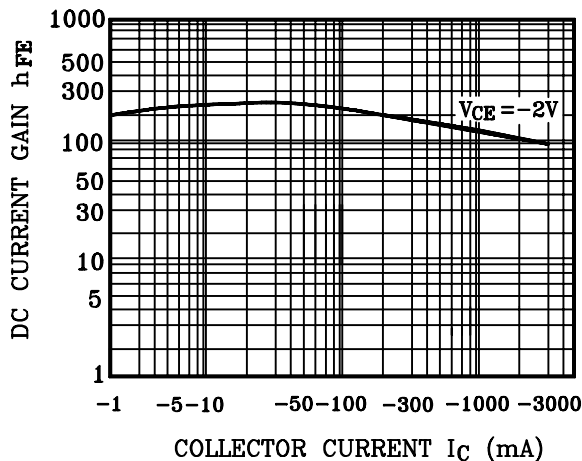
* Pulse Test : Pulse Width $\leq 350\mu S$, Duty Cycle $\leq 2\%$ Pulsed

Note: $h_{FE}(2)$ Classification O:100~200, Y:160~320, GR:200~400

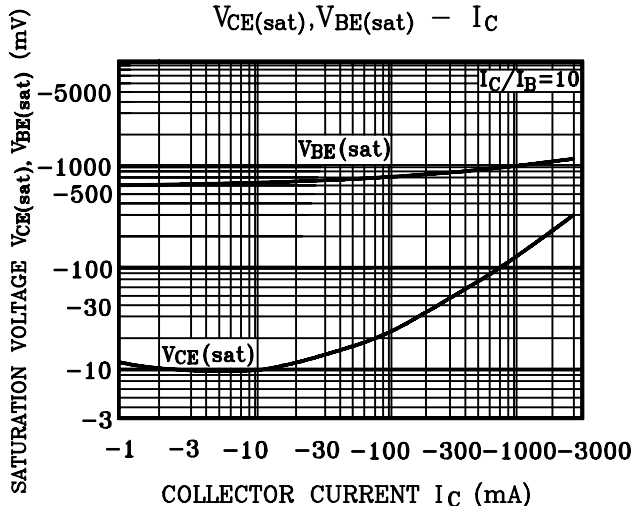
$I_C - V_{CE}$



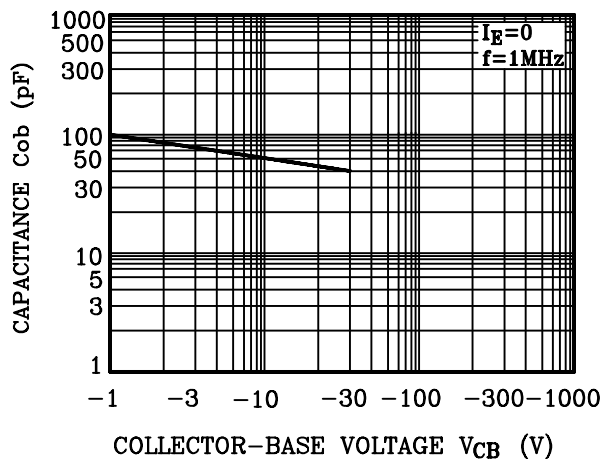
$h_{FE} - I_C$



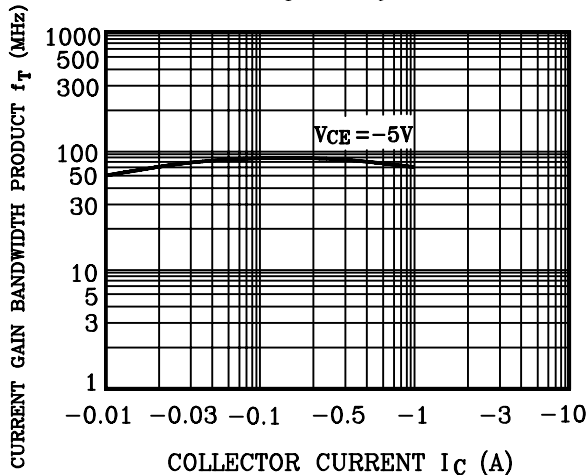
$V_{CE(sat)}, V_{BE(sat)} - I_C$



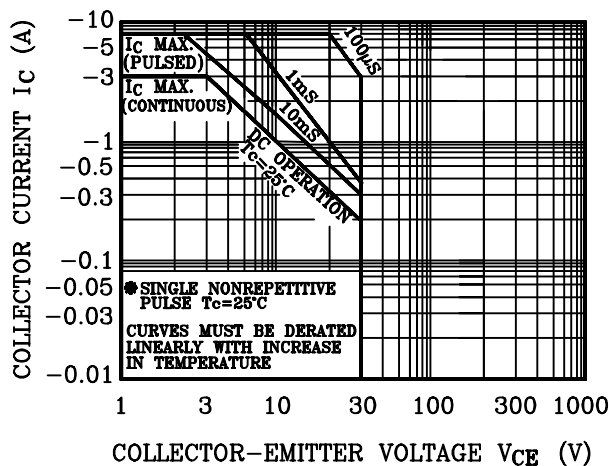
$f_T - I_C$



$f_T - I_C$



SAFE OPERATING AREA



KTB772

