

AUDIO FREQUENCY POWER AMPLIFIER  
LOW SPEED SWITCHING

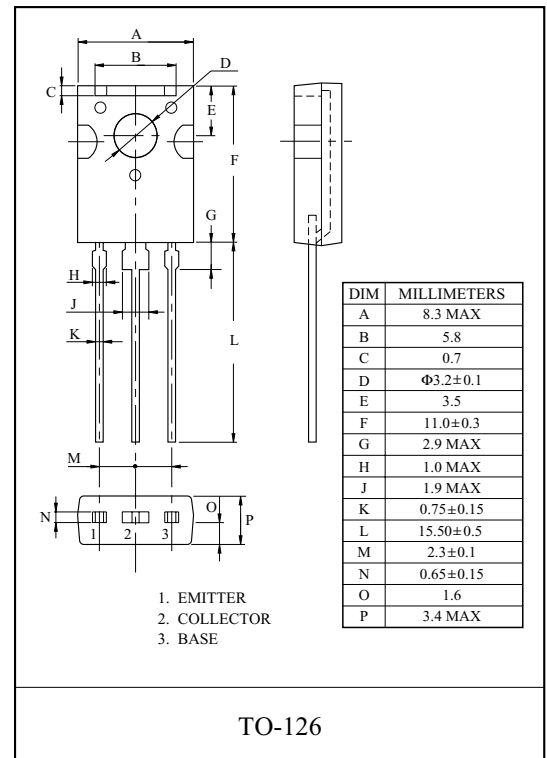
### FEATURES

- Complementary to KTD882.

### MAXIMUM RATING (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)	$I_{CP}$	-7	
Base Current (DC)		$I_B$	-0.6	A
Collector Power Dissipation	Ta=25	$P_C$	1.5	W
	Tc=25		10	
Junction Temperature		$T_j$	150	
Storage Temperature Range		$T_{stg}$	-55 150	

Note : Pulse Width 10mS, Duty Cycle 50%.



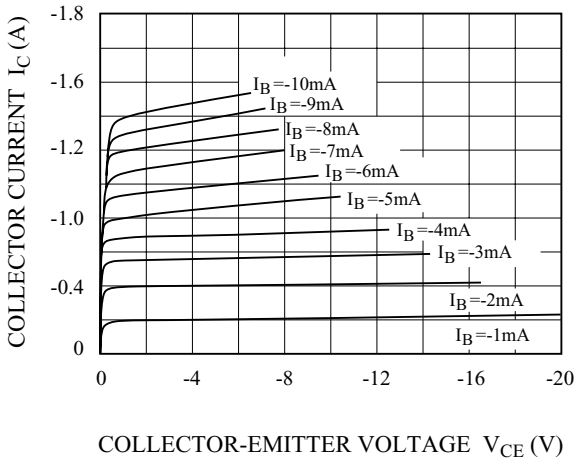
### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -30V, I_E = 0$	-	-	-1	$\mu A$
Emitter-Cut-off Current	$I_{EBO}$	$V_{EB} = -3V, I_C = 0$	-	-	-1	$\mu A$
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

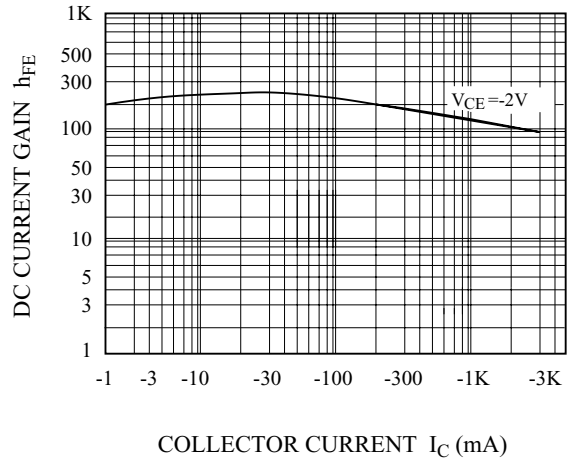
\* Pulse Test : Pulse Width 350  $\mu s$ , Duty Cycle 2% Pulsed

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

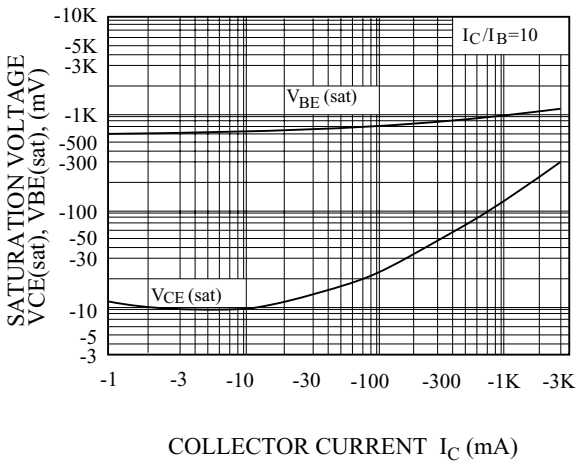
$I_C - V_{CE}$



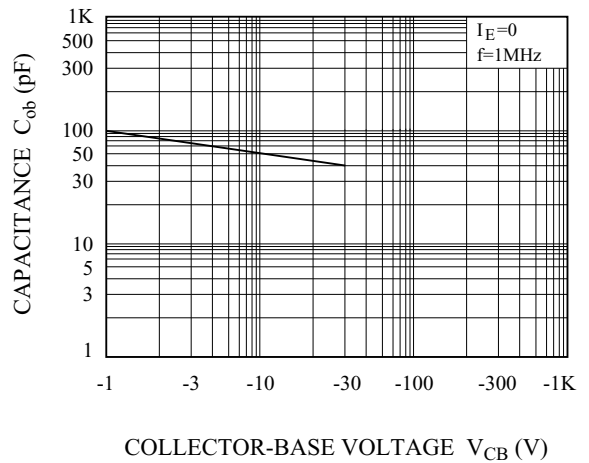
$h_{FE} - I_C$



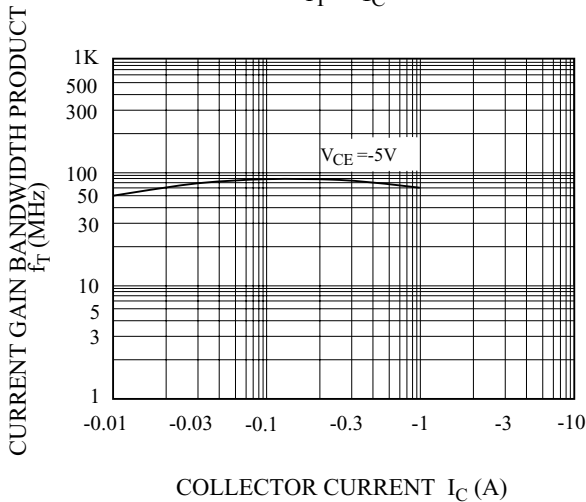
$V_{CE(sat)}, V_{BE(sat)} - I_C$



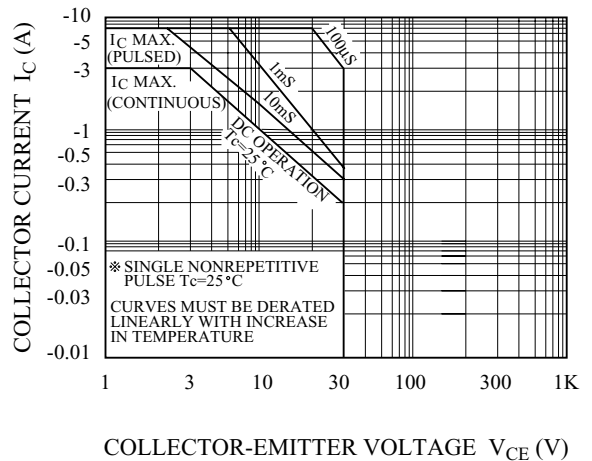
$C_{ob} - V_{CB}$



$f_T - I_C$

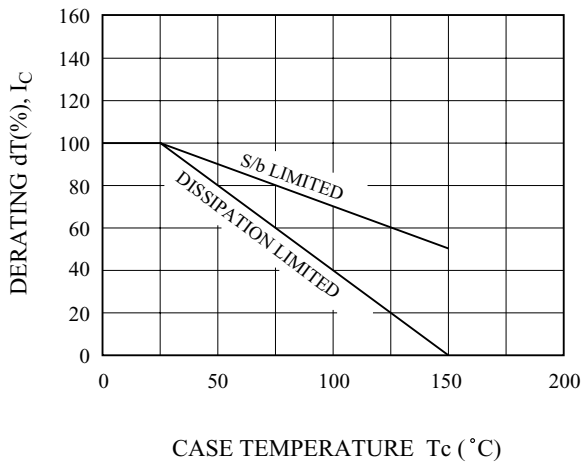


SAFE OPERATING AREA



# KTB772

dT - Tc



P<sub>c</sub> - T<sub>c</sub>

