

AUDIO FREQUENCY POWER AMPLIFIER LOW SPEED SWITCHING

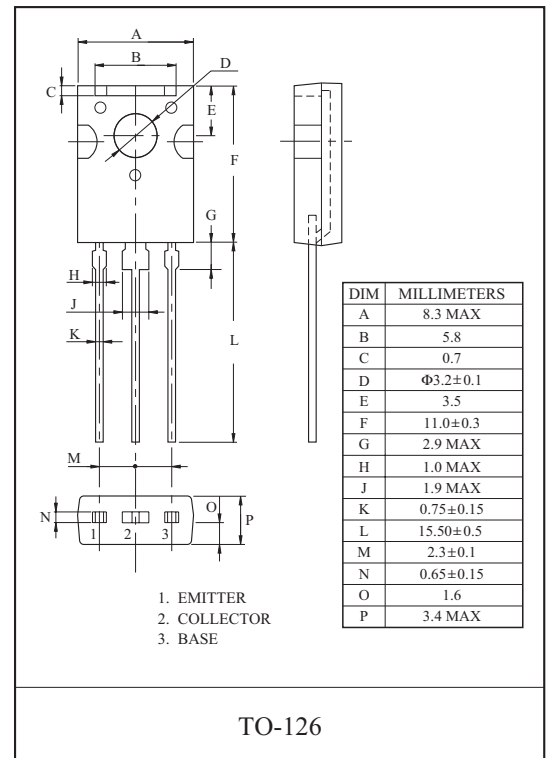
FEATURES

- Complementary to KTD882.
- Suffix U : Qualified to AEC-Q101.
ex) KTB772-Y-U/PU

MAXIMUM RATING (Ta=25)

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%.



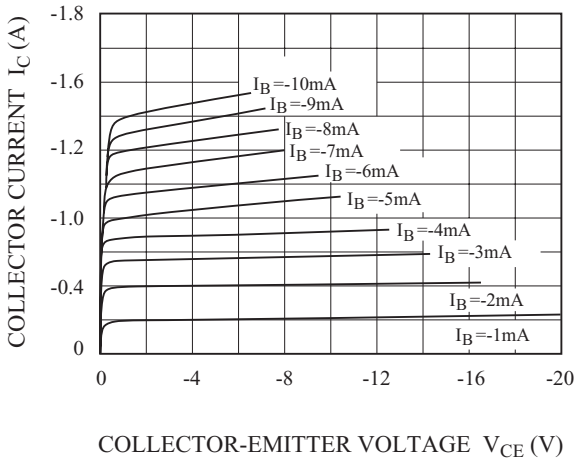
ELECTRICAL CHARACTERISTICS (Ta=25)

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

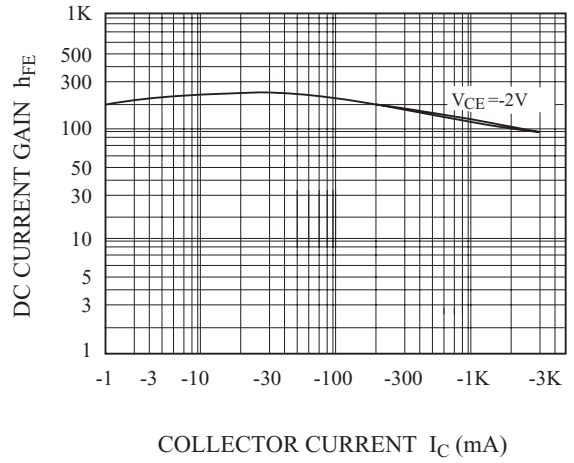
* Pulse Test : Pulse Width 350 μs, Duty Cycle 2% Pulsed

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

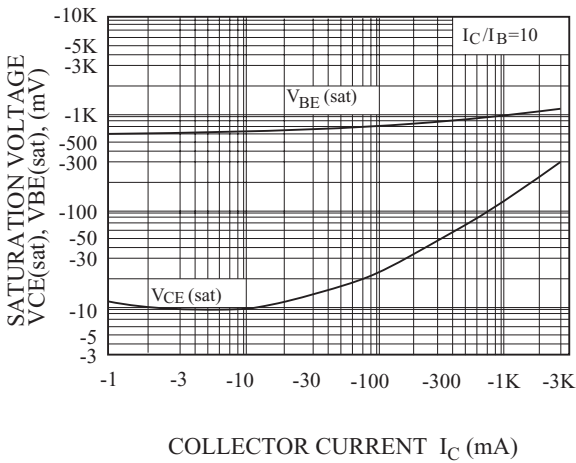
$I_C - V_{CE}$



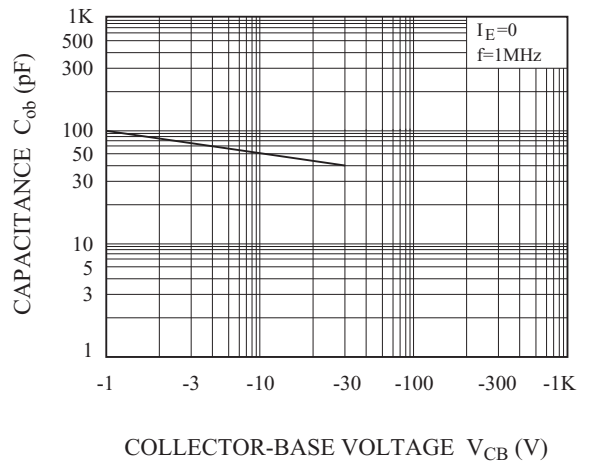
$h_{FE} - I_C$



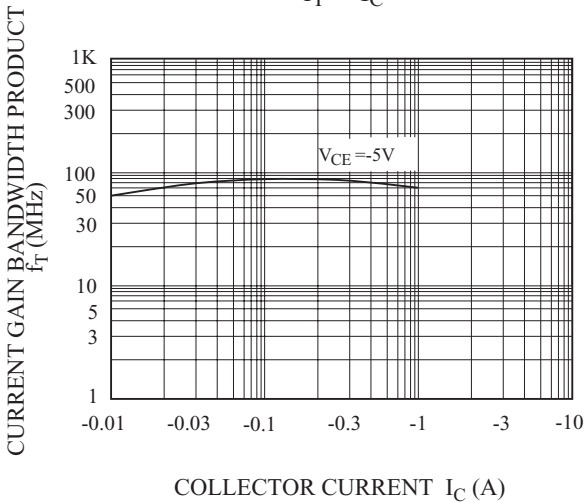
$V_{CE(sat)}, V_{BE(sat)} - I_C$



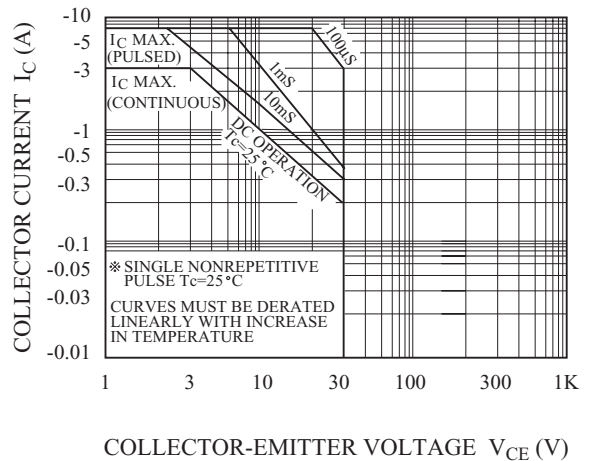
$C_{ob} - V_{CB}$



$f_T - I_C$

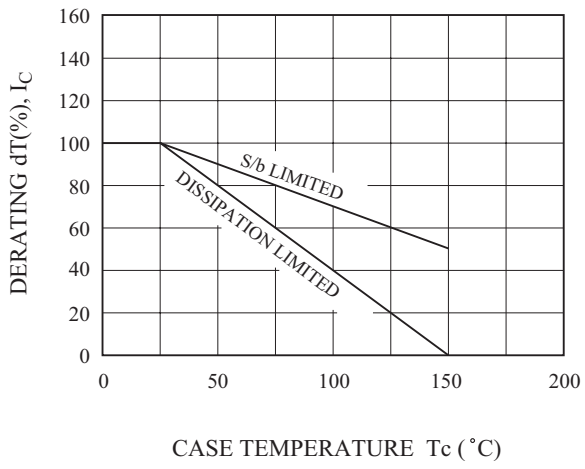


SAFE OPERATING AREA



KTB772

dT - T_c



P_c - T_c

