

AUDIO FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING

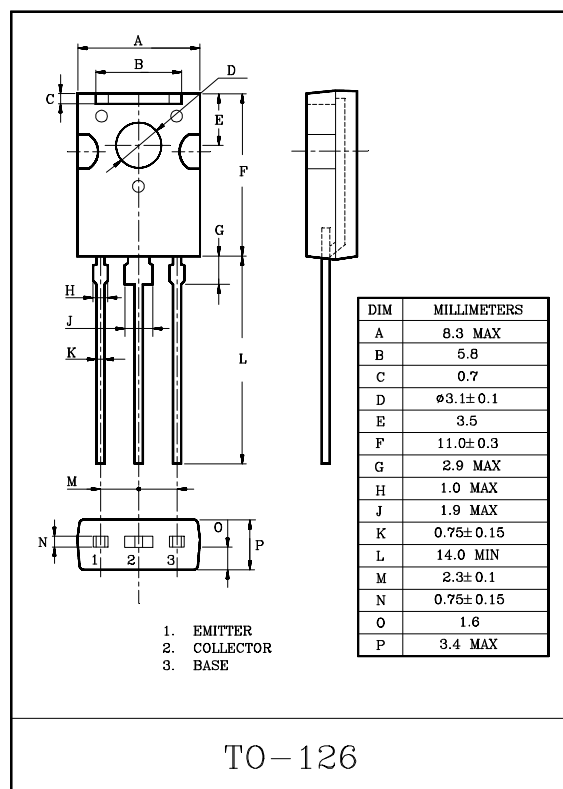
FEATURES

- Complementary to KTB772.

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)	I_{CP}	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}	$V_{CB}=30\text{V}$, $I_E=0$	—	—	1	μA
Emitter-Cut-off Current	I_{EBO}	$V_{EB}=3\text{V}$, $I_C=0$	—	—	1	μA
DC Current Gain *	$h_{FE}(1)$	$V_{CE}=2\text{V}$, $I_C=20\text{mA}$	30	150	—	
	$h_{FE}(2)$ (Note)	$V_{CE}=2\text{V}$, $I_C=1\text{A}$	100	160	400	
Collector-Emitter Saturation Voltage *	$V_{CE(sat)}$	$I_C=2\text{A}$, $I_B=0.2\text{A}$	—	0.3	0.5	V
Base-Emitter Saturation Voltage *	$V_{BE(sat)}$	$I_C=2\text{V}$, $I_B=0.2\text{A}$	—	1.0	2.0	V
Current Gain Bandwidth Product	f_T	$V_{CE}=5\text{V}$, $I_C=0.1\text{A}$	—	90	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$	—	45	—	pF

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

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

