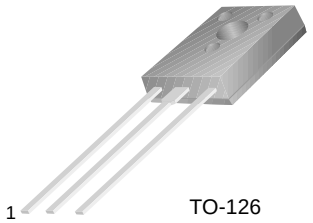
FAIRCHILD
SEMICONDUCTOR TM

KSB772

Audio Frequency Power Amplifier

- Low Speed Switching
- Complement to KSD882



TO-126

1. Emitter 2.Collector 3.Base

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 40	V
V_{CEO}	Collector-Emitter Voltage	- 30	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current (DC)	- 3	A
I_{CP}	*Collector Current (Pulse)	- 7	A
I_B	Base Current (DC)	- 0.6	A
P_C	Collector Dissipation (T_C=25°C)	10	W
P_C	Collector Dissipation (T_a=25°C)	1	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

* PW≤10ms, Duty Cycle≤50%

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB} = - 30V, I_E = 0			- 1	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 3V, I_C = 0			- 1	μA
h_{FE1} h_{FE2}	* DC Current Gain	V_{CE} = - 2V, I_C = - 20mA V_{CE} = - 2V, I_C = - 1A	30 60	220 160	 400	
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = - 2A, I_B = - 0.2A		- 0.3	- 0.5	V
V_{BE}(sat)	* Base-Emitter Saturation Voltage	I_C = - 2A, I_B = - 0.2A		- 1.0	- 2.0	V
f_T	Current Gain Bandwidth Product	V_{CE} = - 5V, I_E = - 0.1A		80		MHz
C_{ob}	Output Capacitance	V_{CB} = - 10V, I_E = 0 f = 1MHz		55		pF

* Pulse Test: PW≤350μs, Duty Cycle≤2%

h_{FE} Classificntion

Classification	R	O	Y	G
h_{FE2}	60 ~ 120	100 ~ 200	160 ~ 320	200 ~ 400

Typical Characteristics

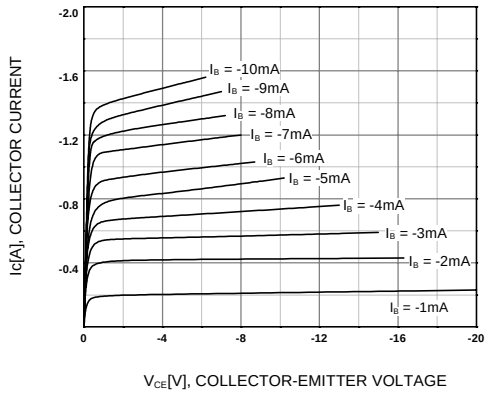


Figure 1. Static Characteristic

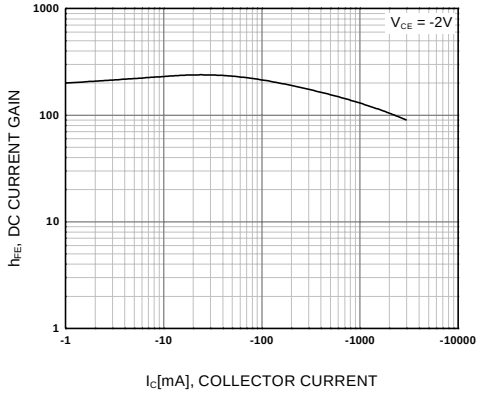


Figure 2. DC current Gain

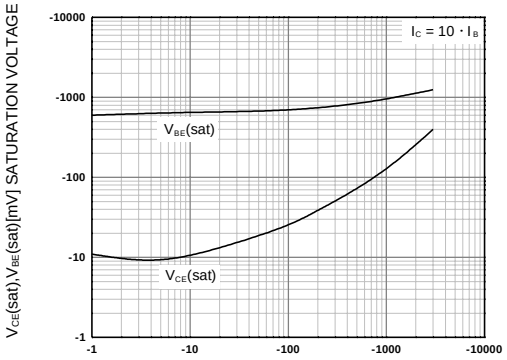


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

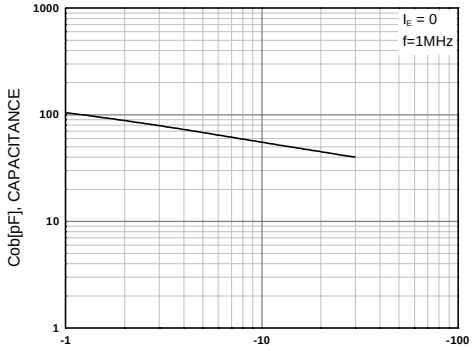


Figure 4. Collector Output Capacitance

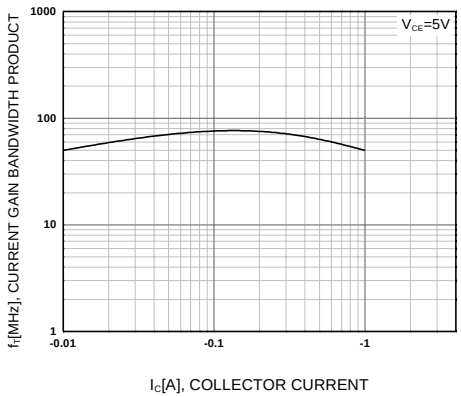


Figure 5. Current Gain Bandwidth Product

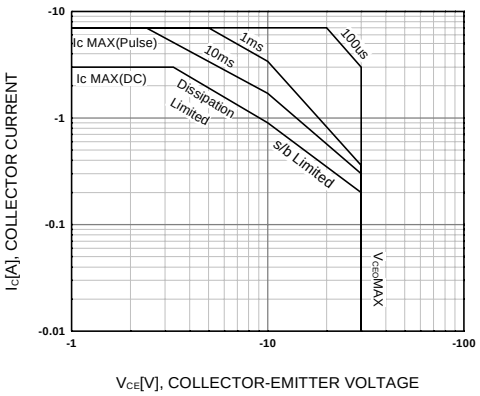


Figure 6. Safe Operating Area

Typical Characteristics (Continued)

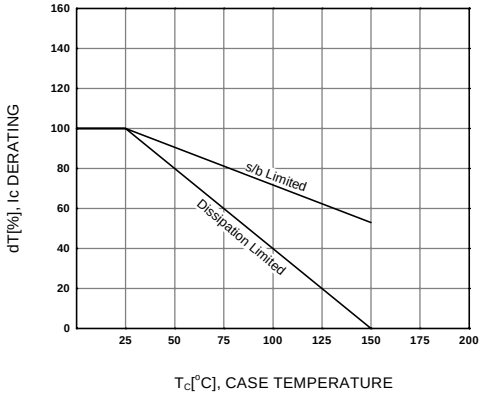


Figure 7. Derating Curve of Safe Operating Areas

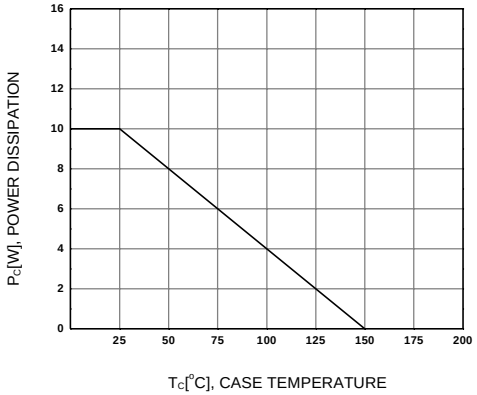
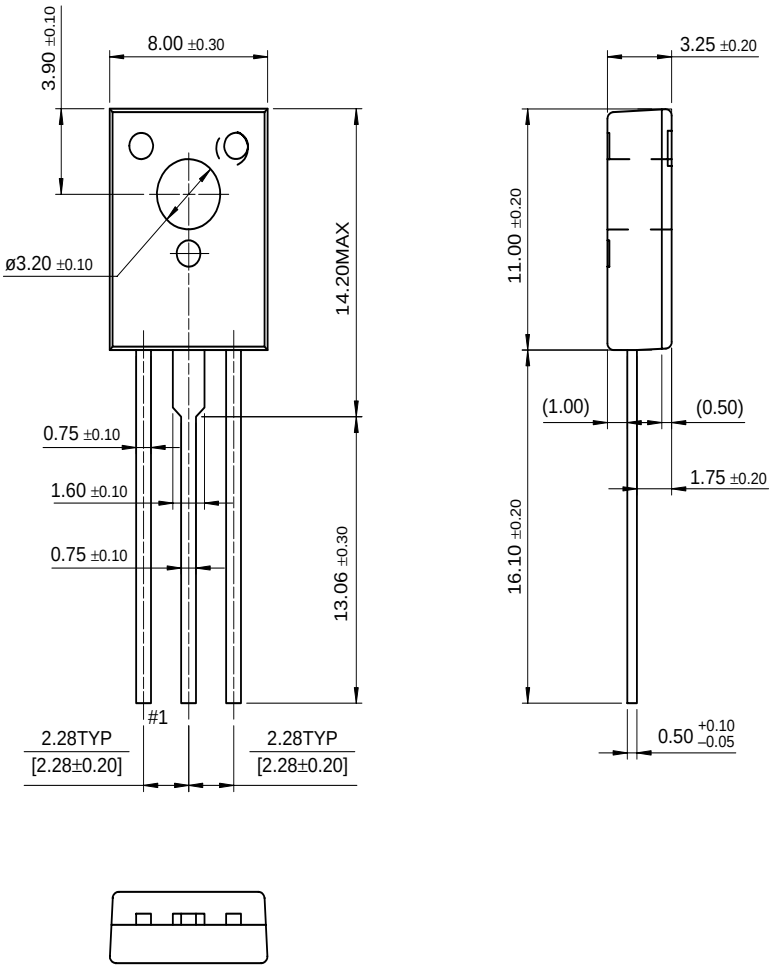


Figure 8. Power Derating

Package Demensions

TO-126



Dimensions in Millimeters

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