

KSH772

SemiHow
Know-How for Semiconductor

KSH772

Audio Frequency Power Amplifier


- Low Speed Switching
- Complement to KSH882

Absolute Maximum Ratings TC=25°C unless otherwise noted

3 Amperes
PNP Epitaxial Silicon Transistor
1 Watts

CHARACTERISTICS	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
*Collector Current(Pulse)	I_{CP}	-7	A
Base Current(DC)	I_B	-0.6	A
Collector Dissipation(Tc=25°C)	P_C	10	W
Collector Dissipation(Tc=25°C)	P_C	1	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55~150	°C

TO-126
1. Emitter
2. Collector
3. Base



*Plus Widths≤10ms, Dutys≤50%

Electrical Characteristics TC=25°C unless otherwise noted

CHARACTERISTICS	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_{FE1} h_{FE2}	$V_{CE} = -2V, I_C = -20mA$ $V_{CE} = -2V, I_C = -1A$	30 60	220 160	400	
*Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -0.2mA$		-0.3	-0.5	V
*Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -2A, I_B = -0.2mA$		-1.0	-2.0	V
Current Gain Bandwidth Product	f_T	$V_{CE} = -5V, I_C = -0.1A$		80		MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0$ $F = 1MHz$		55		pF

* Pulse Test: Pulse Widths≤300μs, Duty Cycles≤2%

Note.

hFE2 Classification	R	60 ~ 120
	O	100 ~ 200
	Y	160 ~ 320
	G	250 ~ 500

Package Mark information.

S YWWH Y KSH772	S	SemiHow Logo
	YWW	Y; year code, WW; week code
	H	Assembly code
	Y	hFE2 Classification

Typical Characteristics

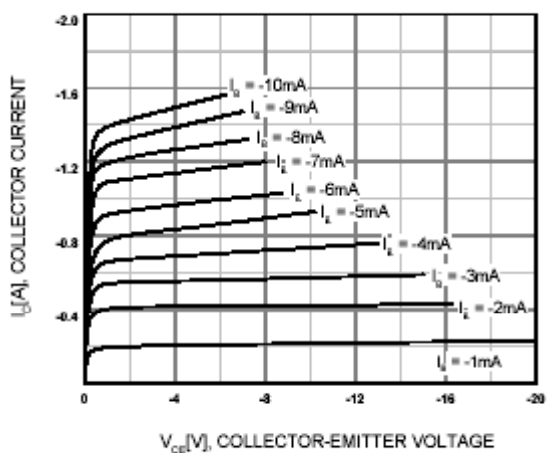


Figure 1. Static Characteristic

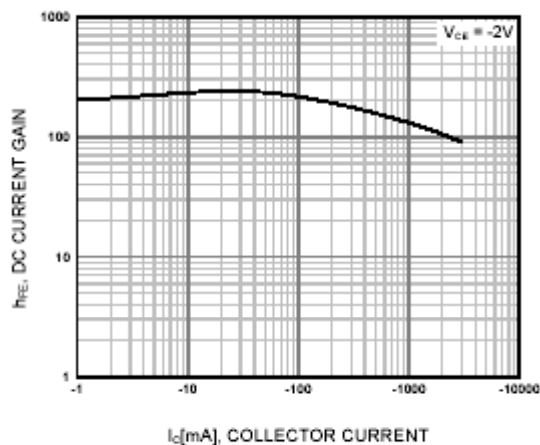


Figure 2. DC current Gain

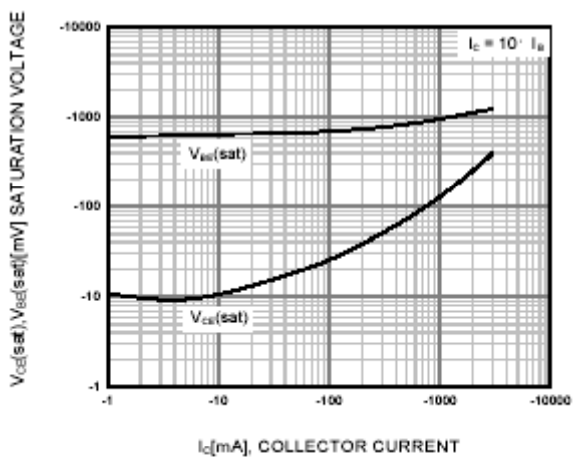


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

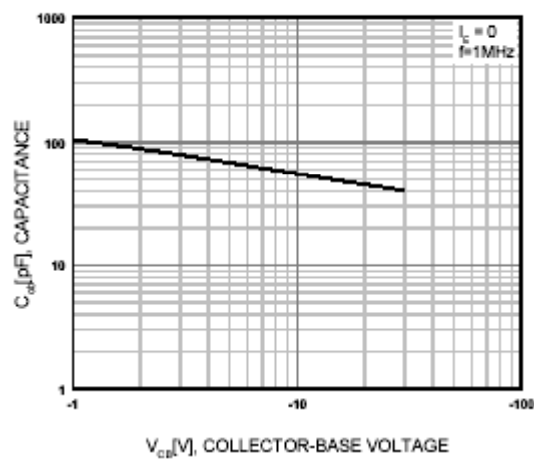


Figure 4. Collector Output Capacitance

Typical Characteristics (Continued)

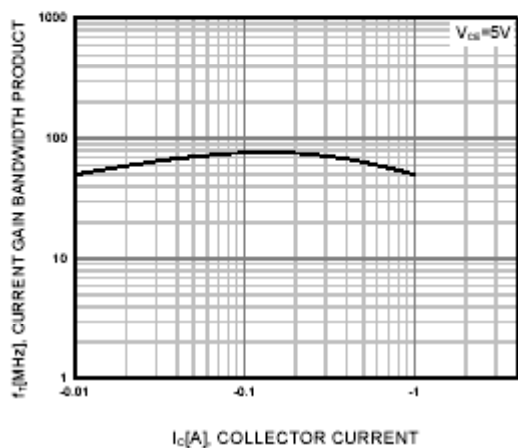


Figure 5. Current Gain Bandwidth Product

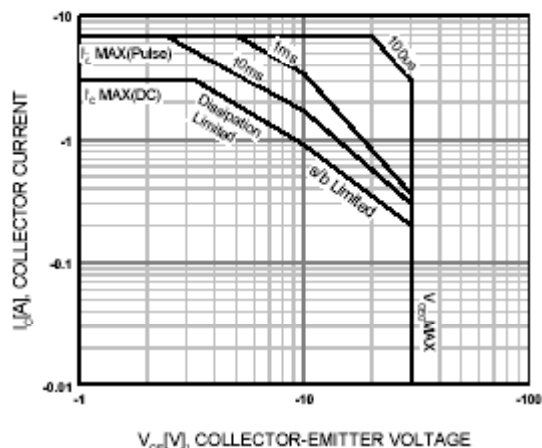


Figure 6. Safe Operating Area

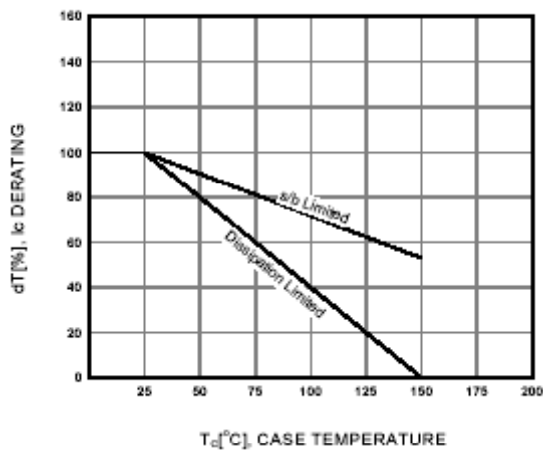


Figure 7. Derating Curve of Safe Operating Areas

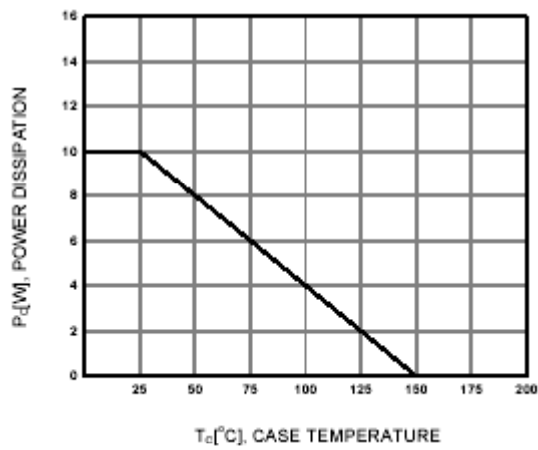
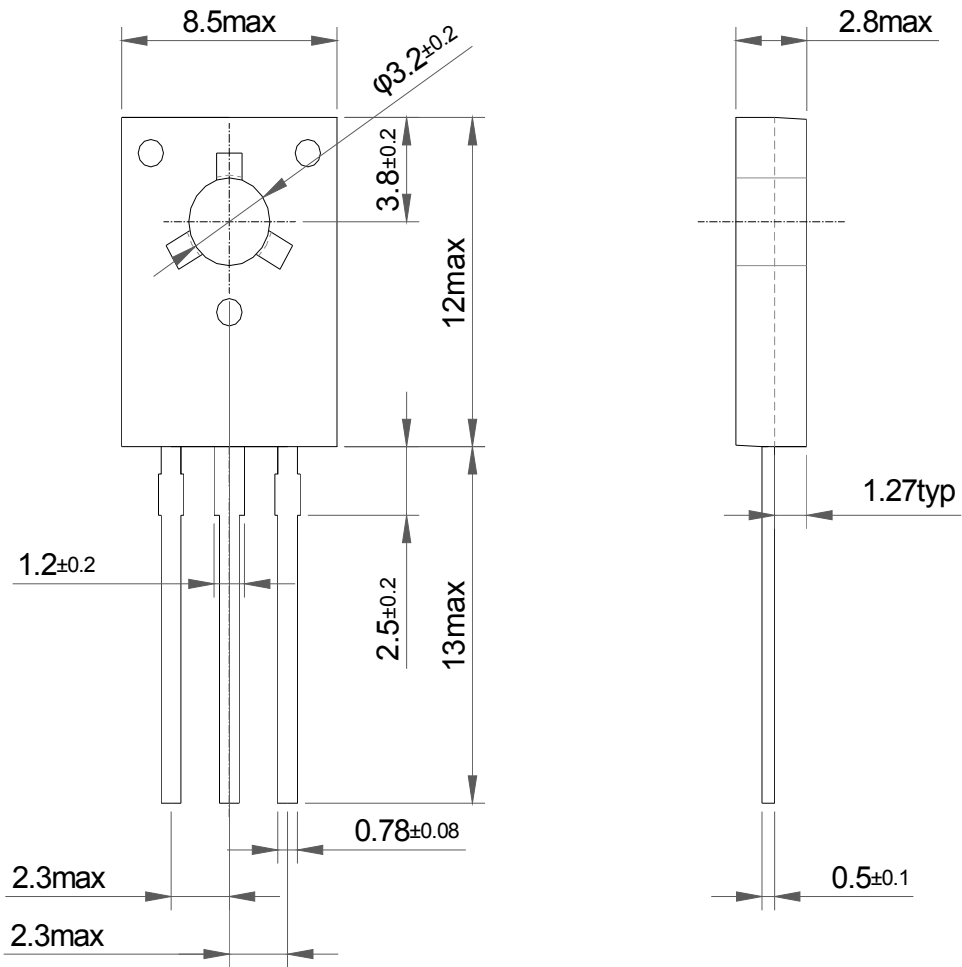


Figure 8. Power Derating

Package Dimension

TO-126



Dimensions in Millimeters