

KSH882



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Audio Frequency Power Amplifier

- Low Speed Switching
- Complement to KSH772

Absolute Maximum Ratings $T_C=25^{\circ}\text{C}$ unless otherwise noted

3 Amperes
NPN 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	I_B	0.6	A
Collector Dissipation($T_C=25^{\circ}\text{C}$)	P_C	10	W
Collector Dissipation($T_C=25^{\circ}\text{C}$)	P_C	1	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~150	$^{\circ}\text{C}$

TO-18
1. Emitter
2. Collector
3. Base



*Plus Widths $\leq 10\text{ms}$, Duty $\leq 50\%$

Electrical Characteristics $T_C=25^{\circ}\text{C}$ unless otherwise noted

CHARACTERISTICS	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_{FE1} h_{FE2}	$V_{CE}=2\text{V}, I_C=20\text{mA}$ $V_{CE}=2\text{V}, I_C=1\text{A}$	30 60	150 160	400	
*Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{A}, I_B=0.2\text{mA}$		0.3	0.5	V
*Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2\text{A}, I_B=0.2\text{mA}$		1.0	2.0	V
Current Gain Bandwidth Product	f_T	$V_{CE}=5\text{V}, I_C=0.1\text{A}$		90		MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0$ $F=1\text{MHz}$		45		pF

* Pulse Test: Pulse Widths $\leq 300\mu\text{s}$, Duty Cycles $\leq 2\%$

Note.

Package Mark information.

hFE2 Classification	R	60 ~ 120	S YWWH Y KSH882	S	SemiHow Logo
	O	100 ~ 200		YWW	Y; year code, WW; week code
	Y	160 ~ 320		H	Assembly code
	G	250 ~ 500		Y	hFE2 Classification

Typical Characteristics

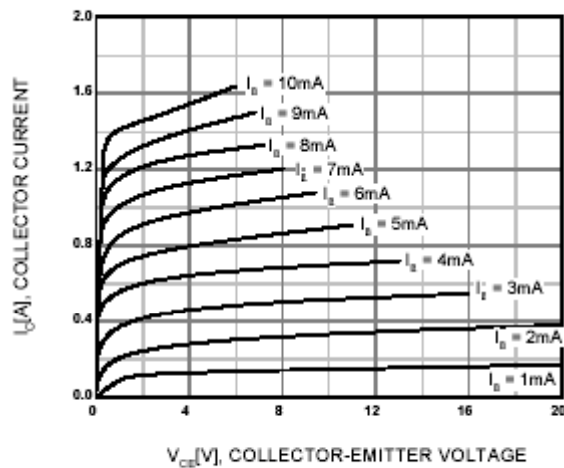


Figure 1. Static Characteristic

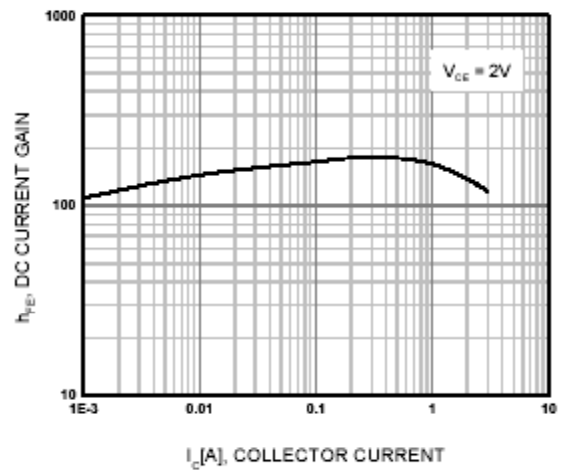


Figure 2. DC current Gain

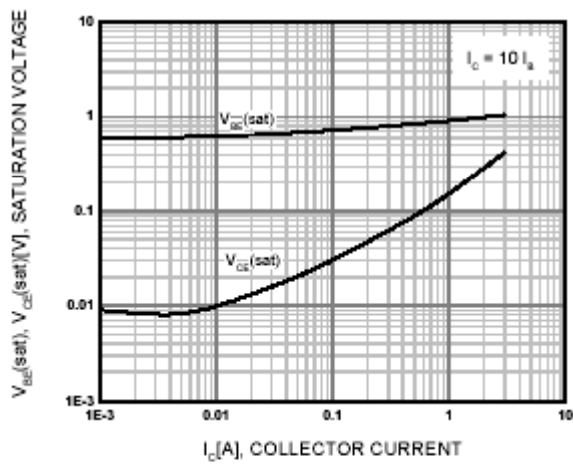


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

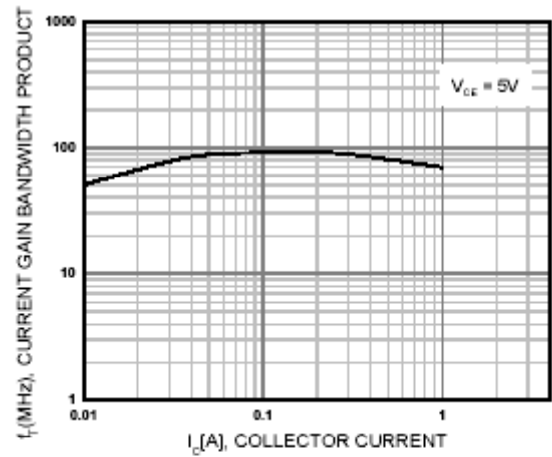


Figure 4. Current Gain Bandwidth Product

Typical Characteristics (Continued)

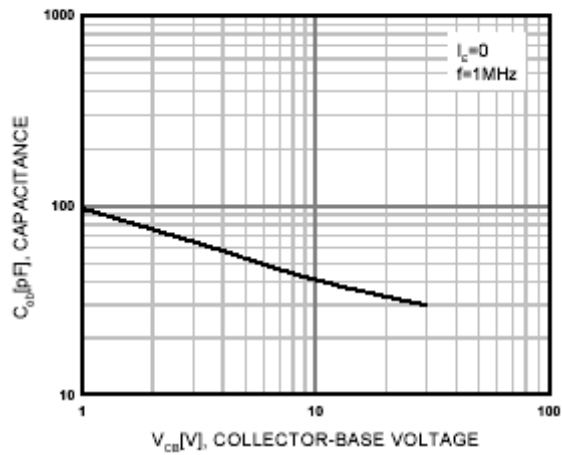


Figure 5. Collector Output Capacitance

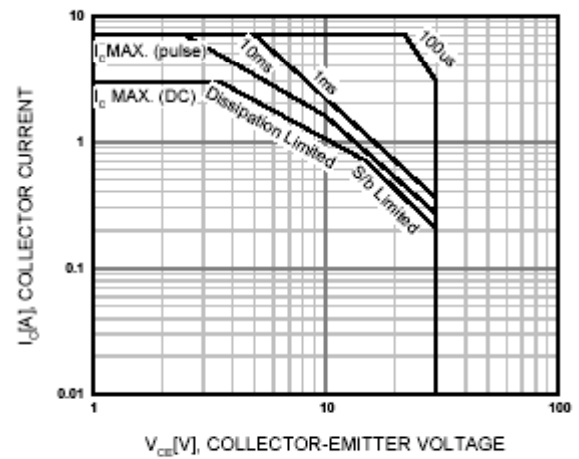


Figure 6. Safe Operating Area

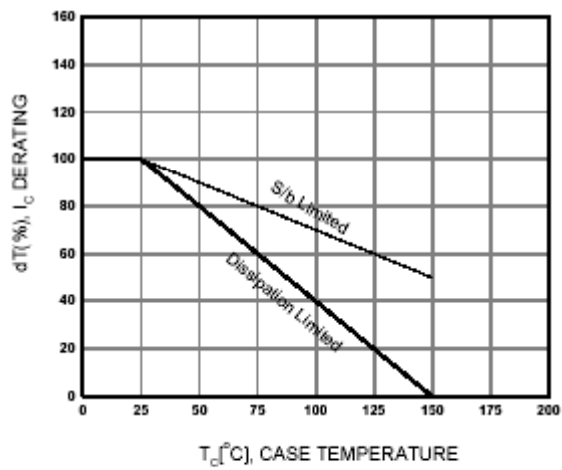


Figure 7. Derating Curve Of Safe Operating Areas

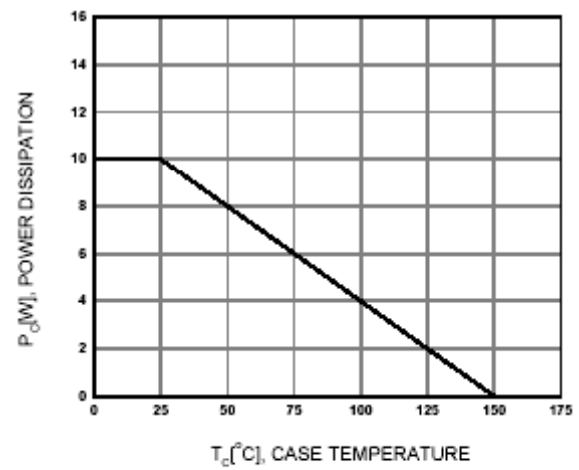


Figure 8. Power Derating

Package Dimension

TO-126

