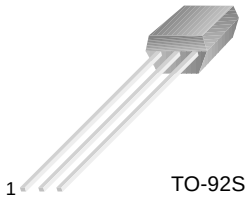
FAIRCHILD
SEMICONDUCTOR®

KSB811

Audio Frequency Power Amplifier

- Complement to KSD1021
- Collector Current : I_C= -1A
- Collector Power Dissipation : P_C=350mW



TO-92S

1.Emitter 2. Collector 3. Base

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1.0	A
P_C	Collector Power Dissipation	350	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= -100μA, I_E= 0	-30			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= -10mA, I_B= 0	-25			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -100μA, I_C= 0	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB}= -30V, I_E=0			-0.1	μA
h_{FE}	DC Current Gain	V_{CE}= -1V, I_C= -100mA	70		400	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C= -1A, I_B= -0.1A			-0.5	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C= -1A, I_B= -0.1A			-1.2	V
f_T	Current Gain Bandwidth Product	V_{CE}= -6V, I_C= -10mA		110		MHz
C_{ob}	Output Capacitance	V_{CB}= -6V, I_E=0, f=1MHz		18		pF

h_{FE} Classification

Classification	O	Y	G
h_{FE}	70 ~ 140	120 ~ 240	200 ~ 400

Typical Characteristics

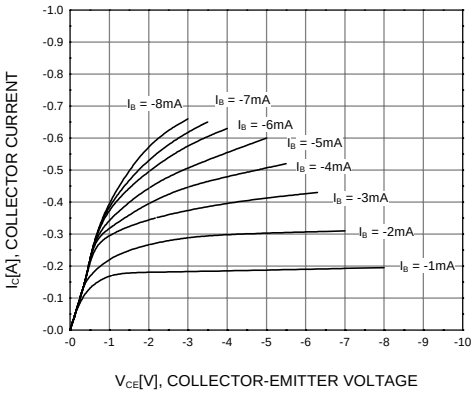


Figure 1. Static Characteristic

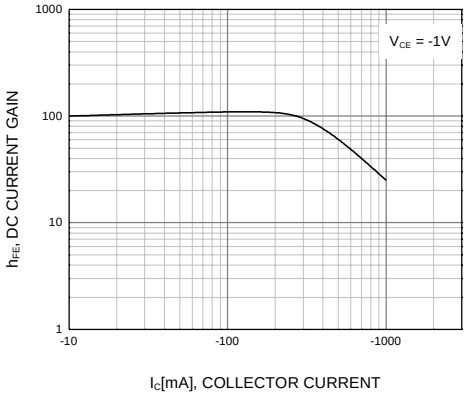


Figure 2. DC current Gain

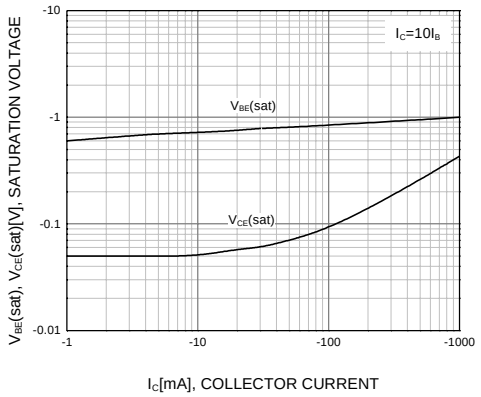


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

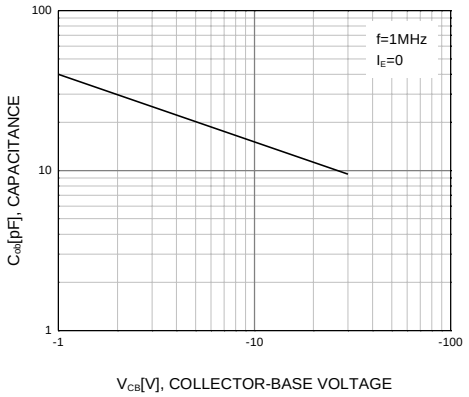


Figure 4. Collector Output Capacitance

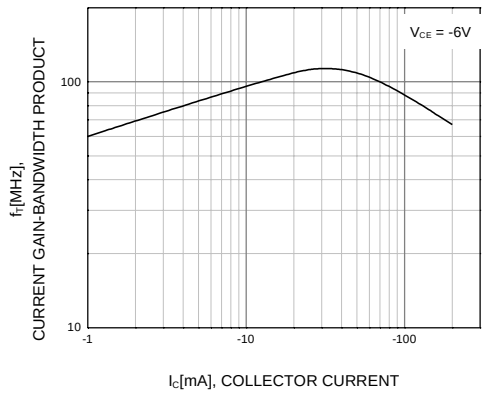


Figure 5. Current Gain Bandwidth Product

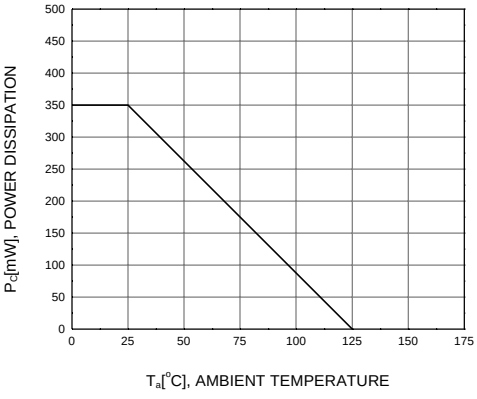
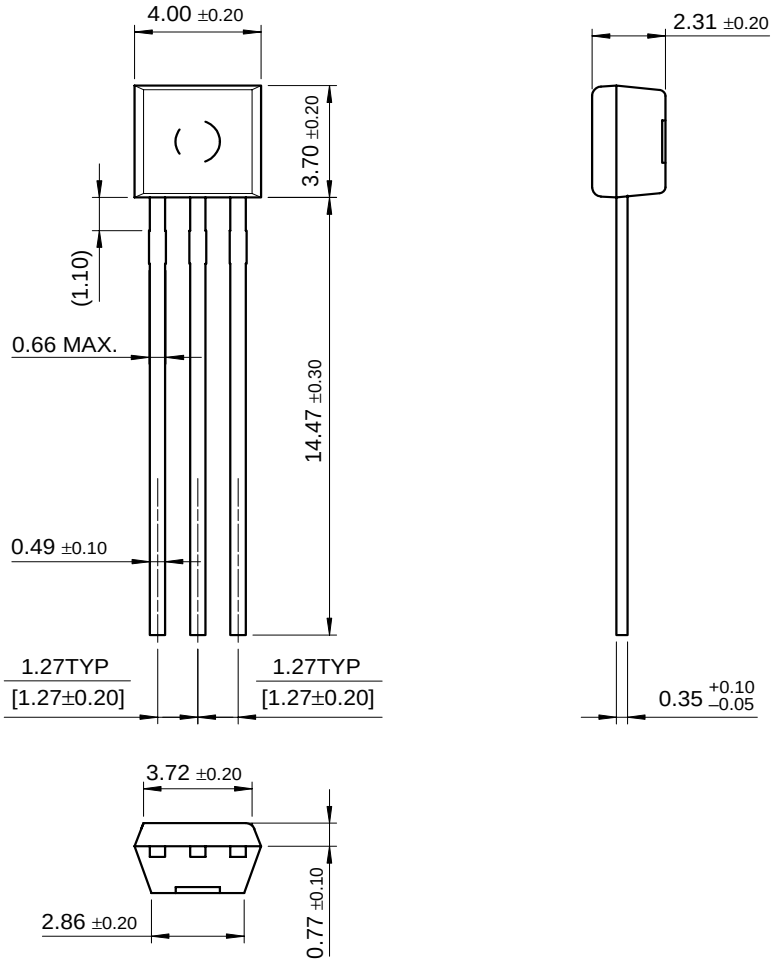


Figure 6. Power Derating

Package Demensions

TO-92S



Dimensions in Millimeters

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