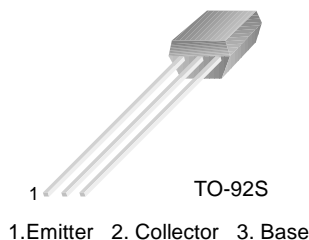


# KSB811

## Audio Frequency Power Amplifier

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



## PNP Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_a = 25^\circ C$ 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	$^\circ C$
$T_{STG}$	Storage Temperature	-55 ~ 150	$^\circ C$

### Electrical Characteristics $T_a = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = -100\mu A, I_E = 0$	-30			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10mA, I_B = 0$	-25			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = -100\mu A, I_C = 0$	-5			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = -30V, I_E = 0$			-0.1	$\mu A$
$h_{FE}$	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

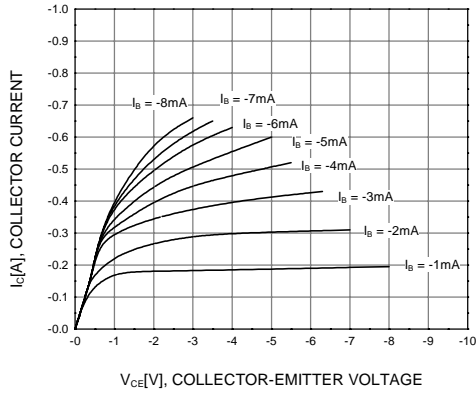


Figure 1. Static Characteristic

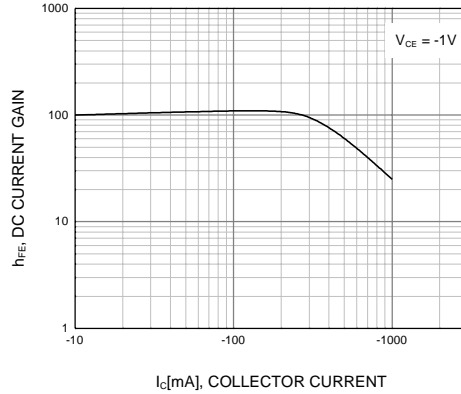


Figure 2. DC current Gain

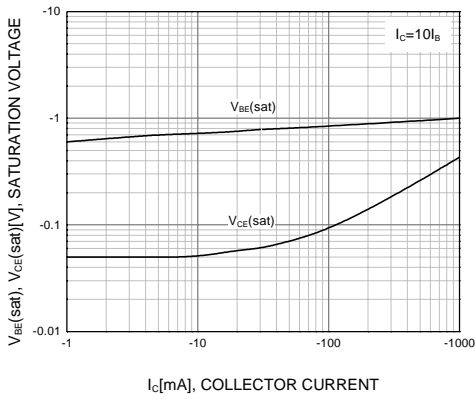


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

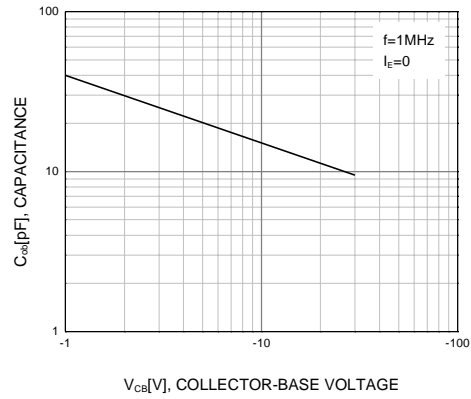


Figure 4. Collector Output Capacitance

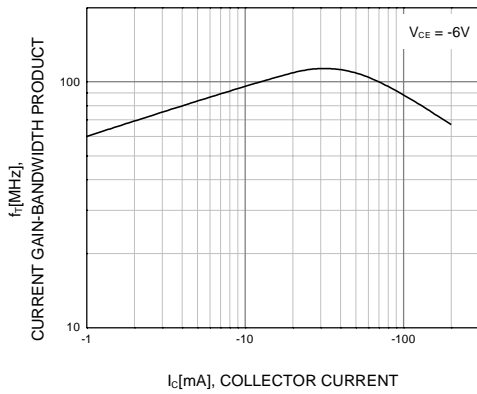


Figure 5. Current Gain Bandwidth Product

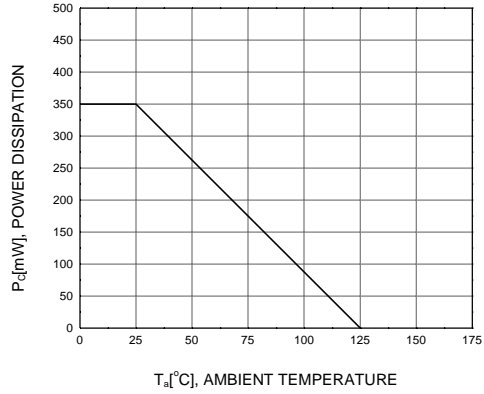
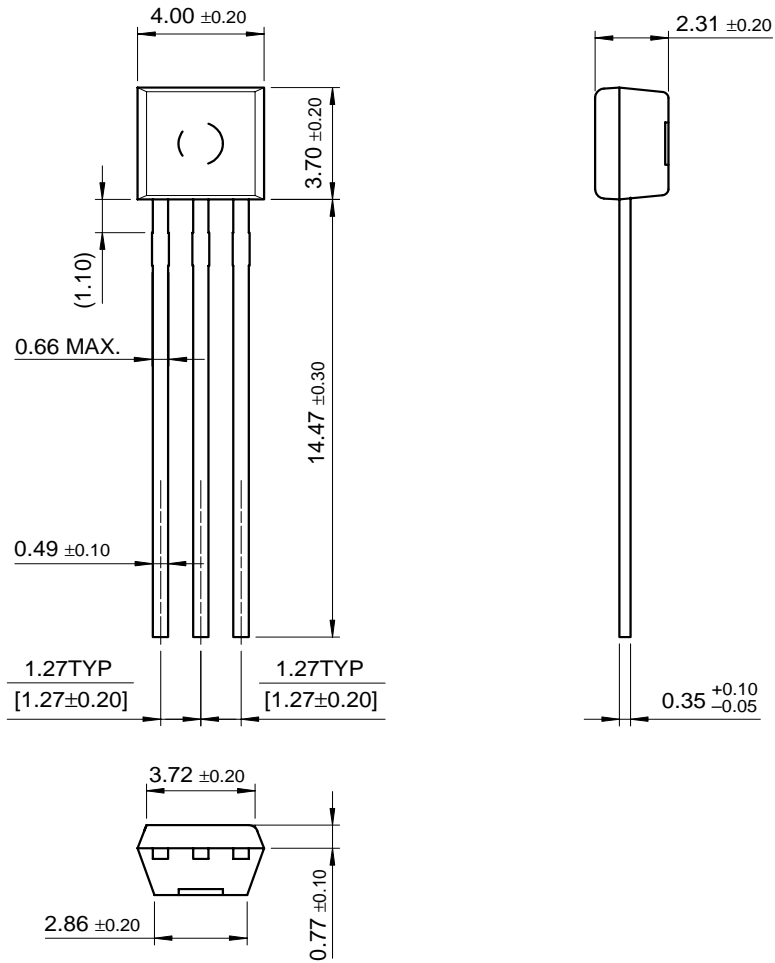


Figure 6. Power Derating

# Package Dimensions

## TO-92S



Dimensions in Millimeters

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