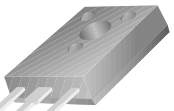
KSB772

Audio Frequency Power Amplifier

- Low Speed Switching
- Complement to KSD882



1 TO-126

1. Emitter 2. Collector 3. Base

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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
	Collector Dissipation (T_a=25°C)	1	W
$R_{\theta ja}$	Junction to Ambient	132	°C/W
$R_{\theta jc}$	Junction to Case	13.5	°C/W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

* 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

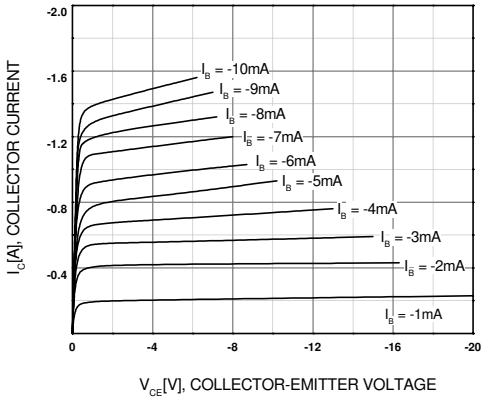


Figure 1. Static Characteristic

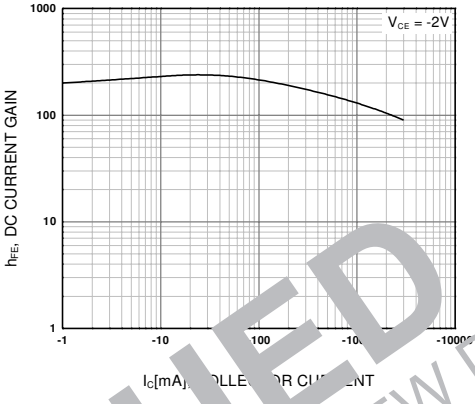


Figure 2. DC current Gain

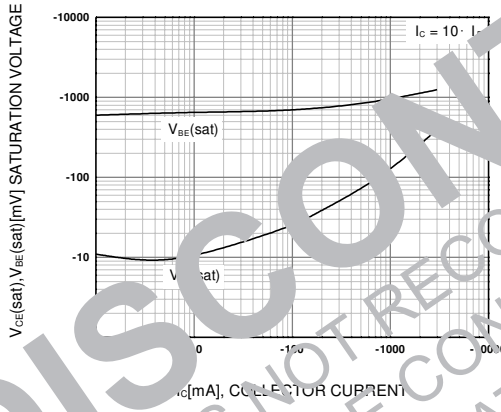


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

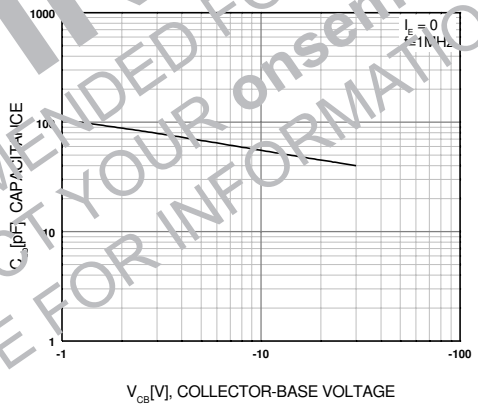


Figure 4. Collector Output Capacitance

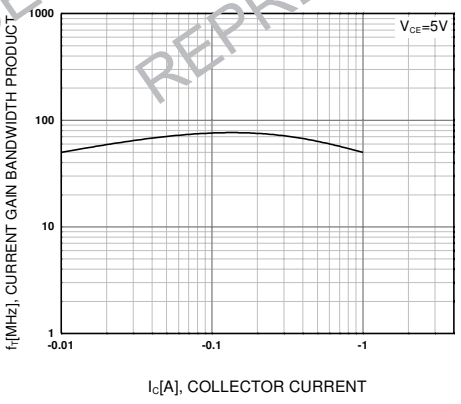


Figure 5. Current Gain Bandwidth Product

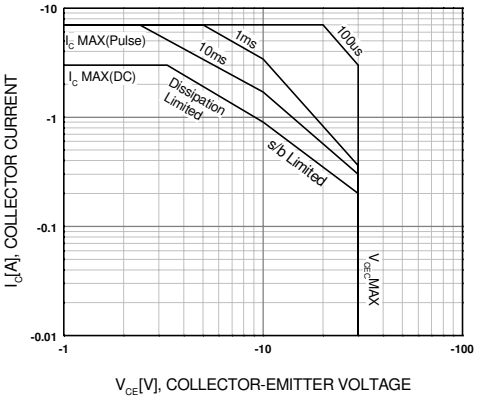


Figure 6. Safe Operating Area

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Typical Characteristics (Continued)

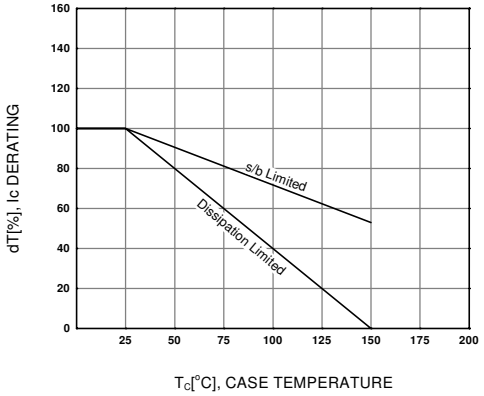


Figure 7. Derating Curve of Safe Operating Areas

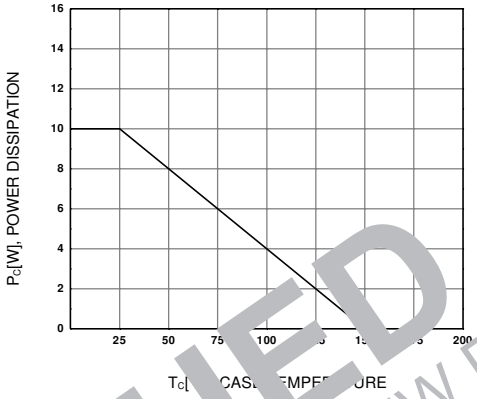
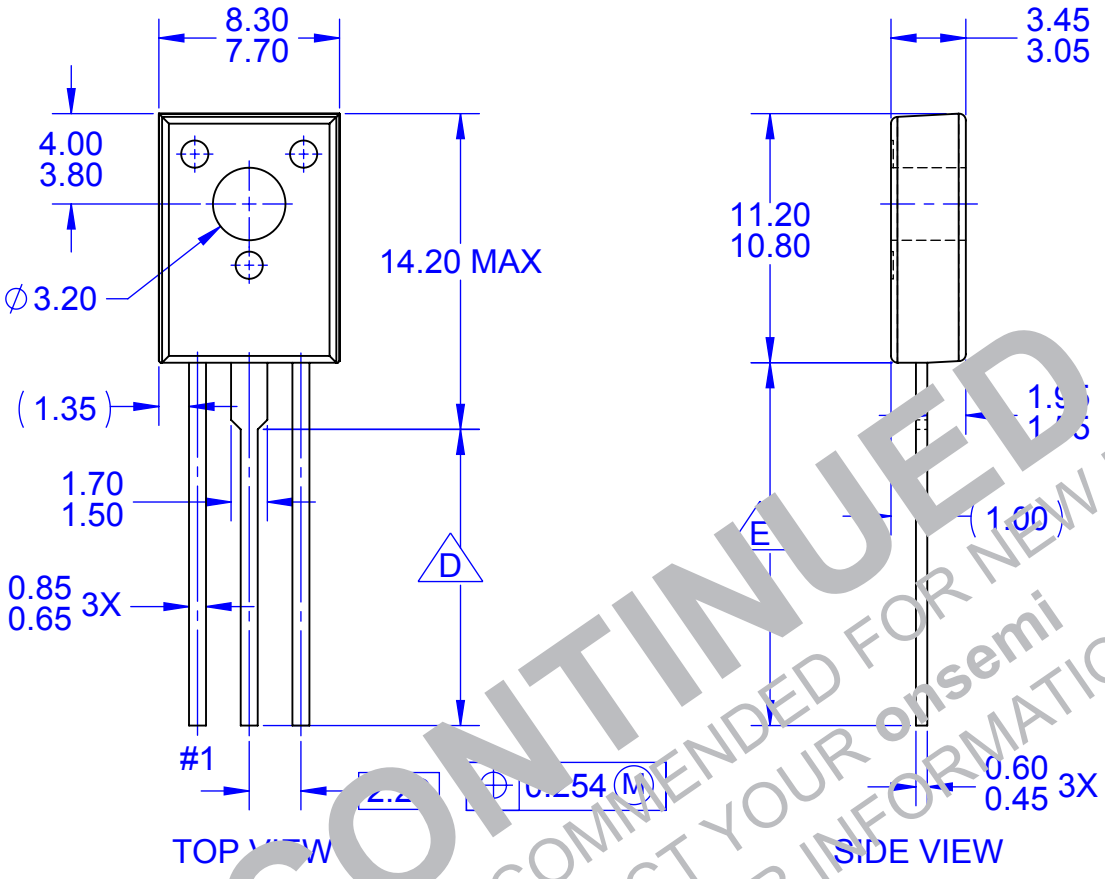
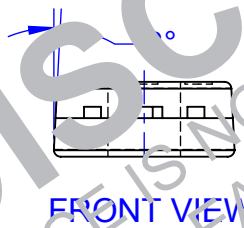


Figure 8. Power Derating

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PRODUCTION CODE	TERMINAL LENGTH "D"	TERMINAL LENGTH "E"
TSSTU	3.45 - 4.05	6.45-7.45
TSTU	2.36 - 2.96	5.36-6.36
NONE (STD LENGTH)	12.76 - 13.36	15.76-16.76

NOTES:

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B. ALL DIMENSIONS ARE IN MILLIMETERS
C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR PROTRUSIONS

△D FOR TERMINAL LENGTH "D", REFER TO TABLE

△E FOR TERMINAL LENGTH "E", REFER TO TABLE

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