

KSB564A

Audio Frequency Power Amplifier

- Complement to KSD471A
- Collector Current : I_C = -1A
- Collector Power Dissipation : P_C = 800mW
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



1. Emitter 2. Base 3. Collector

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	А
P _C	Collector Power Dissipation	800	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.	Тур.	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	μΑ
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	0	Y	G
h _{FE}	70 ~ 140	120 ~ 240	200 ~ 400

Typical Characteristics

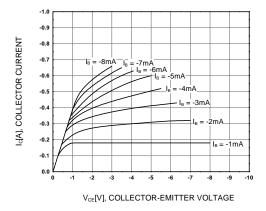
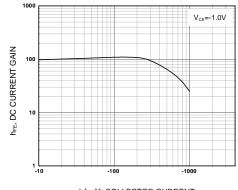


Figure 1. Static Characteristic



I_C[mA], COLLECTOR CURRENT

Figure 2. DC current Gain

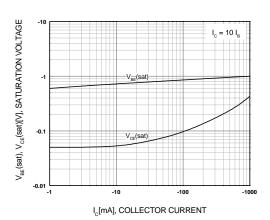


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

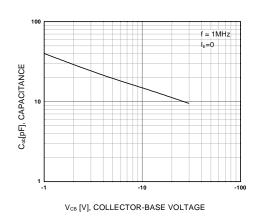


Figure 4. Collector Output Capacitance

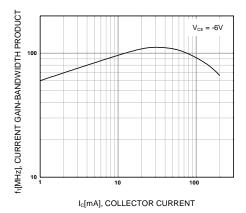


Figure 5. Current Gain Bandwidth Product

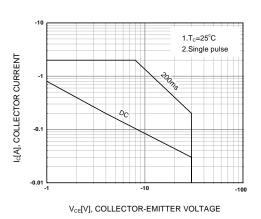
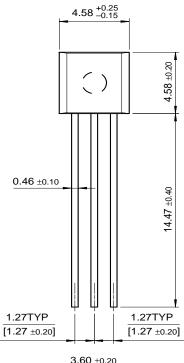


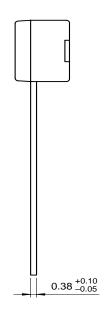
Figure 6. Safe Operating Area

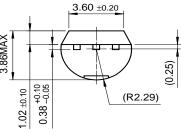
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Package Demensions





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