

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)



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	Α
P _C	Collector Power Dissipation	800	mW
TJ	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 μ 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

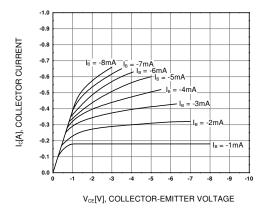


Figure 1. Static Characteristic

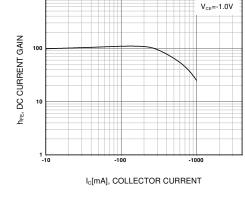


Figure 2. DC current Gain

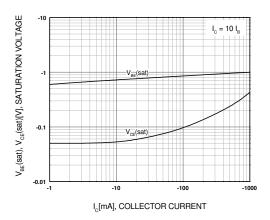


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

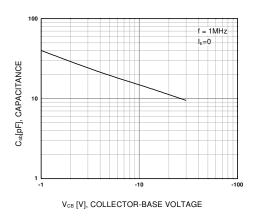


Figure 4. Collector Output Capacitance

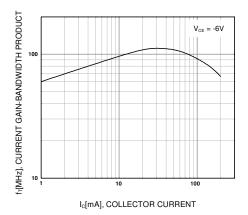


Figure 5. Current Gain Bandwidth Product

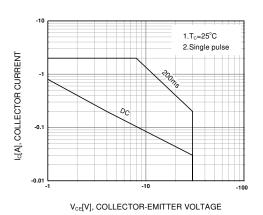
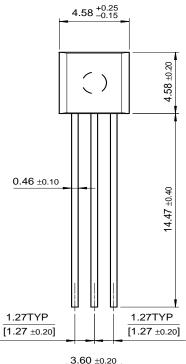


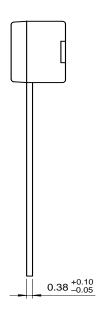
Figure 6. Safe Operating Area

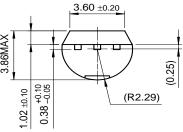
©2001 Fairchild Semiconductor Corporation Rev. A1, June 2001



TO-92







TRADEMARKS

The following are registered and unregistered trademarks Fairchild Semiconductor owns or is authorized to use and is not intended to be an exhaustive list of all such trademarks.

ACEx™	FAST [®]	OPTOPLANAR™	STAR*POWER™
Bottomless™	FASTr™	PACMAN™	Stealth™
CoolFET™	FRFET™	POP™	SuperSOT™-3
$CROSSVOLT^{TM}$	GlobalOptoisolator™	Power247™	SuperSOT™-6
DenseTrench™	GTO™	PowerTrench [®]	SuperSOT™-8
DOME™	HiSeC™	QFET™	SyncFET™
EcoSPARK™	ISOPLANAR™	QS™	TruTranslation™
E ² CMOS™	LittleFET™	QT Optoelectronics™	TinyLogic™
EnSigna™	MicroFET™	Quiet Series™	UHC™
FACT™	MICROWIRE™	SLIENT SWITCHER®	UltraFET [®]
FACT Quiet Series™	OPTOLOGIC™	SMART START™	VCX™

STAR*POWER is used under license

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION.

As used herein:

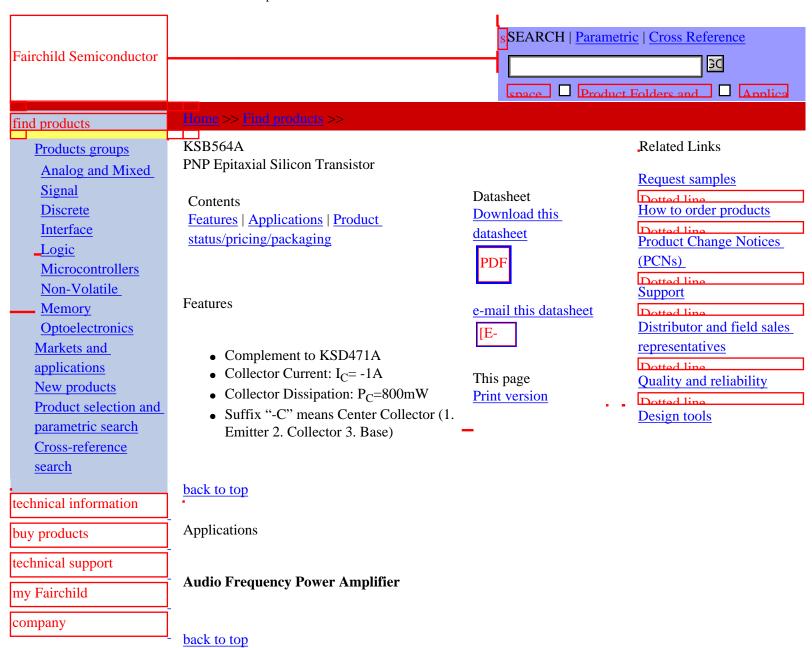
- 1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, or (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.
- 2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

©2001 Fairchild Semiconductor Corporation Rev. H3



Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
KSB564ACOBU	Full Production	\$0.06	<u>TO-92</u>	3	BULK
KSB564ACGBU	Full Production	\$0.06	<u>TO-92</u>	3	BULK
KSB564ACOTA	Full Production	\$0.06	<u>TO-92</u>	3	TAPE REEL
KSB564AOTA	Full Production	\$0.06	<u>TO-92</u>	3	TAPE REEL
KSB564ACYBU	Full Production	\$0.06	<u>TO-92</u>	3	BULK
KSB564ACGTA	Full Production	\$0.06	<u>TO-92</u>	3	TAPE REEL
KSB564AYTA	Full Production	\$0.06	<u>TO-92</u>	3	TAPE REEL
KSB564AGTA	Full Production	\$0.06	<u>TO-92</u>	3	TAPE REEL
KSB564ACYTA	Full Production	\$0.06	<u>TO-92</u>	3	TAPE REEL
KSB564AGBU	Full Production	\$0.06	<u>TO-92</u>	3	BULK

Product Folder - Fairchild P/N KSB564A - PNP Epitaxial Silicon Transistor

KSB564AOBU	Full Production	\$0.06	<u>TO-92</u>	3	BULK
KSB564AYBU	Full Production	\$0.06	<u>TO-92</u>	3	BULK

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>

© Copyright 2002 Fairchild Semiconductor