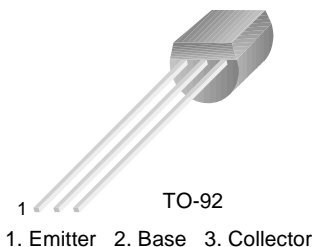


KSP8598/8599

Amplifier Transistor

- Collector-Emitter Voltage: V_{CE0} = KSP8598: 60V
KSP8599: 80V
- Collector Power Dissipation: P_C (max)=625mW
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	: KSP8598	-60
		: KSP8599	-80
V_{CE0}	Collector-Emitter Voltage	: KSP8598	-60
		: KSP8599	-80
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = -100\mu\text{A}, I_E = 0$: KSP8598	-60	V
			: KSP8599	-80	V
BV_{CE0}	* Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}, I_B = 0$: KSP8598	-60	V
			: KSP8599	-80	V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -10\mu\text{A}, I_C = 0$	-5	V	
I_{CBO}	Collector Cut-off Current	$V_{CB} = -60\text{V}, I_E = 0$ $V_{CB} = -80\text{V}, I_E = 0$: KSP8598	-100	nA
			: KSP8599	-100	nA
I_{CEO}	Collector Cut-off Current	$V_{CE} = -60\text{V}, I_B = 0$	-100	nA	
I_{EBO}	Emitter Cut-off Current	$V_{EB} = -4\text{V}, I_C = 0$	-100	nA	
h_{FE}	* DC Current Gain	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$ $V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $V_{CE} = -5\text{V}, I_C = -100\text{mA}$	100	300	
			100		
			75		
$V_{CE(sat)}$	* Collector-Emitter Saturation Voltage	$I_C = -100\text{mA}, I_B = -5\text{mA}$ $I_C = -100\text{mA}, I_B = -10\text{mA}$	-0.4	V	
			-0.3	V	
$V_{BE(on)}$	* Base-Emitter On Voltage	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$ $V_{CE} = -5\text{V}, I_C = -10\text{mA}$	-0.5	-0.7	V
			-0.6	-0.8	V
f_T	Current Gain Bandwidth Product	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $f = 100\text{MHz}$	150	MHz	
C_{ob}	Output Capacitance	$V_{CB} = -5\text{V}, I_E = 0$ $f = 1\text{MHz}$	8	pF	

* Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Typical Characteristics

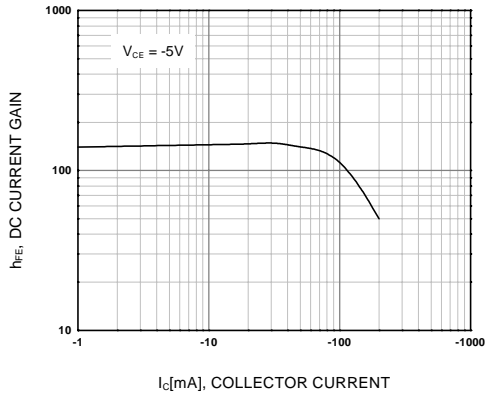


Figure 1. DC current Gain

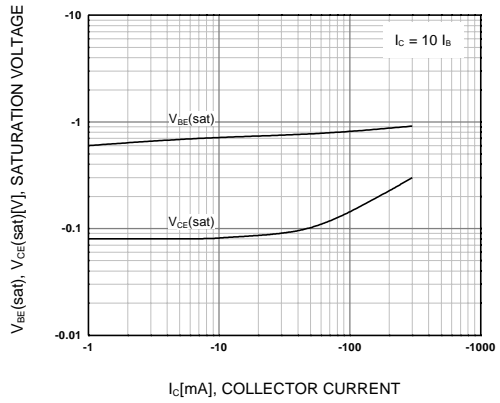


Figure 2. Collector-Emitter Saturation Voltage
Base-Emitter Saturation Voltage

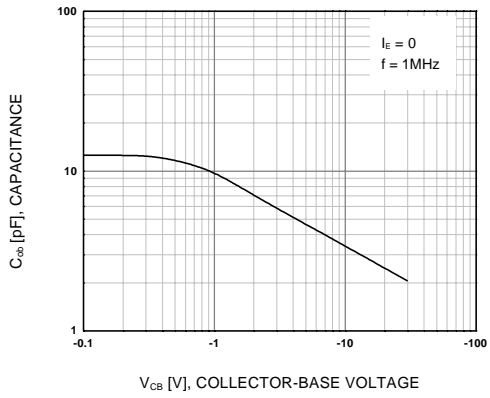


Figure 3. Output Capacitance

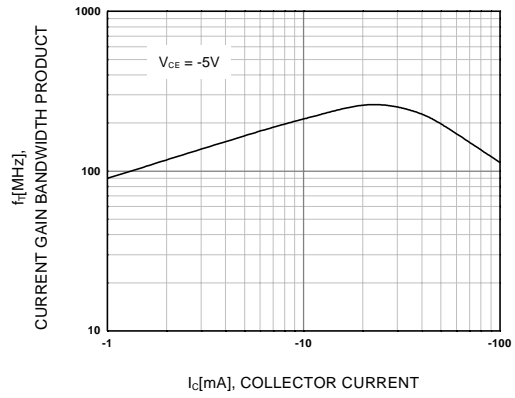
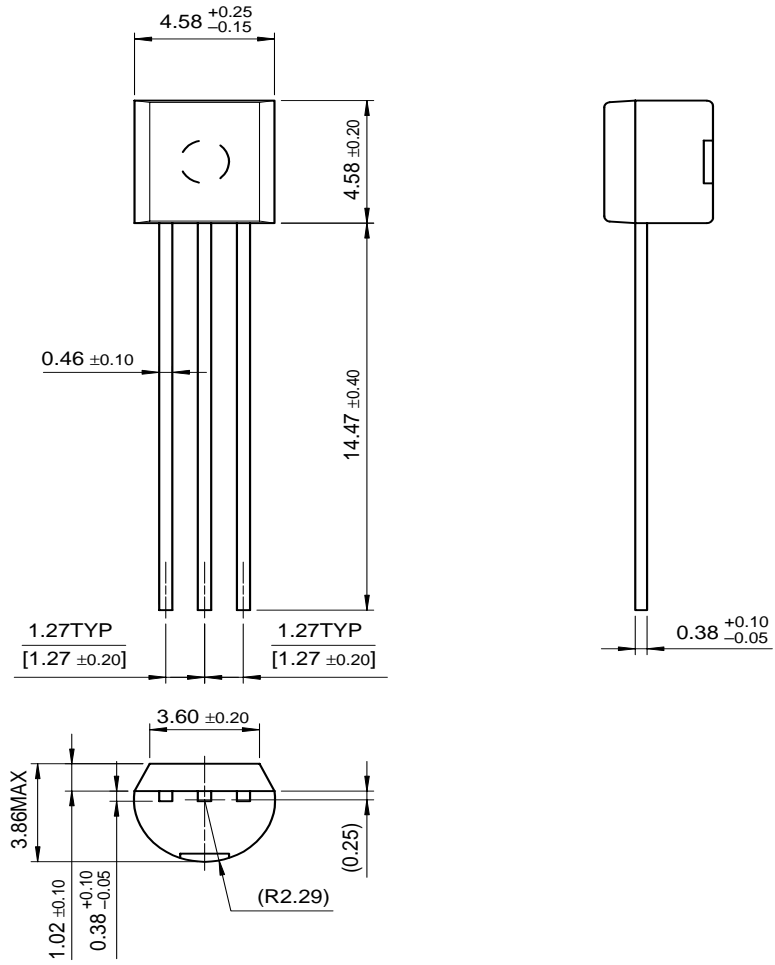


Figure 4. Current Gain Bandwidth Product

Package Dimensions

TO-92

KSP8598/8599



Dimensions in Millimeters

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.

ACE ^x ™	FAST [®]	OPTOPLANAR™	STAR*POWER™
Bottomless™	FAST ^r ™	PACMAN™	Stealth™
CoolFET™	FRFET™	POP™	SuperSOT™-3
CROSSVOLT™	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:

- 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.
- 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.

find products

Home >> Find products >>

Products groups

Analog and Mixed

Signal

Discrete

Interface

Logic

Microcontrollers

Non-Volatile

Memory

Optoelectronics

Markets and

applications

New products

Product selection and

parametric search

Cross-reference

search

technical information

buy products

technical support

my Fairchild

company

KSP8598

PNP Epitaxial Silicon Transistor

Contents

Features | Applications | Product status/pricing/package

Features

- Collector-Emitter Voltage : V_{CEO} = KSP8598: 60V
- Collector-Emitter Voltage : V_{CEO} =KSP8599: 80V
- Collector Dissipation: P_C (max) = 625mW
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)

[back to top](#)

Applications

Amplifier Transistor

[back to top](#)

Product status/pricing/package

Product	Product status	Pricing*	Package type	Leads	Packing method
KSP8598TA	Full Production	\$0.05	TO-92	3	TAPE REEL

* 1,000 piece Budgetary Pricing

[back to top](#)

Related Links

[Request samples](#)

[Dotted line](#)

[How to order products](#)

[Dotted line](#)

[Product Change Notices](#)

[\(PCNs\)](#)

[Dotted line](#)

[Support](#)

[Dotted line](#)

[Distributor and field sales representatives](#)

[Dotted line](#)

[Quality and reliability](#)

[Dotted line](#)

[Design tools](#)

Datasheet

[Download this](#)

[datasheet](#)

PDF

[e-mail this datasheet](#)

[E-

This page

[Print version](#)

find products

[Home](#) >> [Find products](#) >>

[Products groups](#)

[Analog and Mixed](#)

[Signal](#)

[Discrete](#)

[Interface](#)

[Logic](#)

[Microcontrollers](#)

[Non-Volatile](#)

[Memory](#)

[Optoelectronics](#)

[Markets and](#)

[applications](#)

[New products](#)

[Product selection and](#)

[parametric search](#)

[Cross-reference](#)

[search](#)

technical information

buy products

technical support

my Fairchild

company

KSP8599

PNP Epitaxial Silicon Transistor

Contents

[Features](#) | [Applications](#) | [Product status/pricing/package](#)

Features

- Collector-Emitter Voltage : V_{CEO} =
KSP8598: 60V
- Collector-Emitter Voltage :
 V_{CEO} =KSP8599: 80V
- Collector Dissipation: P_C (max) =
625mW
- Suffix “-C” means Center Collector (1.
Emitter 2. Collector 3. Base)

[back to top](#)

Applications

Amplifier Transistor

[back to top](#)

Product status/pricing/package

Product	Product status	Pricing*	Package type	Leads	Packing method
KSP8599TF	Full Production	\$0.05	TO-92	3	TAPE REEL
KSP8599BU	Full Production	\$0.05	TO-92	3	BULK
KSP8599CTA	Full Production	\$0.05	TO-92	3	TAPE REEL
KSP8599TA	Full Production	\$0.05	TO-92	3	TAPE REEL

* 1,000 piece Budgetary Pricing

[back to top](#)

Related Links

[Request samples](#)

[Dotted line](#)

[How to order products](#)

[Dotted line](#)

[Product Change Notices](#)

[\(PCNs\)](#)

[Dotted line](#)

[Support](#)

[Dotted line](#)

[Distributor and field sales representatives](#)

[Dotted line](#)

[Quality and reliability](#)

[Dotted line](#)

[Design tools](#)

Datasheet

[Download this](#)

[datasheet](#)

PDF

[e-mail this datasheet](#)

[E-]

This page

[Print version](#)

[Home](#) | [Find products](#) | [Technical information](#) | [Buy products](#) |
[Support](#) | [Company](#) | [Contact us](#) | [Site index](#) | [Privacy policy](#)

[© Copyright 2002 Fairchild Semiconductor](#)
