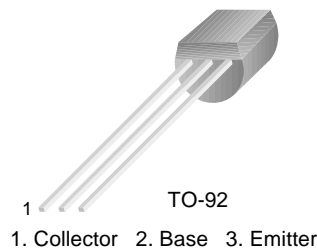


BC327/328

BC327/328

Switching and Amplifier Applications

- Suitable for AF-Driver stages and low power output stages
- Complement to BC337/BC338



PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CES}	Collector-Emitter Voltage : BC327	-50	V
	: BC328	-30	V
V_{CEO}	Collector-Emitter Voltage : BC327	-45	V
	: BC328	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-800	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.	Typ.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage : BC327	$I_C = -10\text{mA}$, $I_B = 0$	-45			V
	: BC328		-25			V
BV_{CES}	Collector-Emitter Breakdown Voltage : BC327	$I_C = -0.1\text{mA}$, $V_{BE} = 0$	-50			V
	: BC328		-30			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -10\mu\text{A}$, $I_C = 0$	-5			V
I_{CES}	Collector Cut-off Current : BC307 : BC338	$V_{CE} = -45\text{V}$, $V_{BE} = 0$		-2	-100	nA
		$V_{CE} = -25\text{V}$, $V_{BE} = 0$		-2	-100	nA
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	100		630	
		$V_{CE} = -1\text{V}$, $I_C = -300\text{mA}$	40			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$			-0.7	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = -1\text{V}$, $I_C = -300\text{mA}$			-1.2	V
f_T	Current Gain Bandwidth Product	$V_{CE} = -5\text{V}$, $I_C = -10\text{mA}$, $f = 20\text{MHz}$		100		MHz
C_{ob}	Output Capacitance	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		12		pF

h_{FE} Classification

Classification	16	25	40
h_{FE1}	100 ~ 250	160 ~ 400	250 ~ 630
h_{FE2}	60-	100-	170-

Typical Characteristics

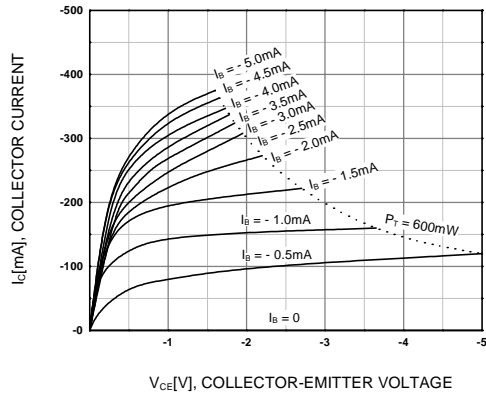


Figure 1. Static Characteristic

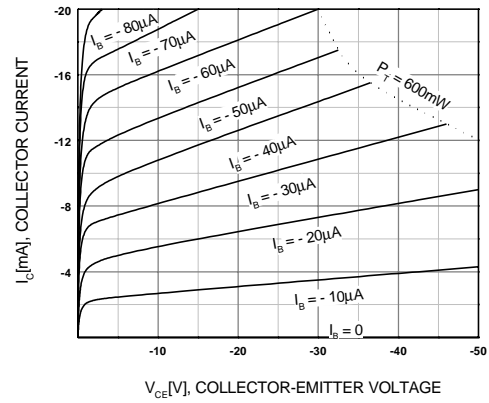


Figure 2. Static Characteristic

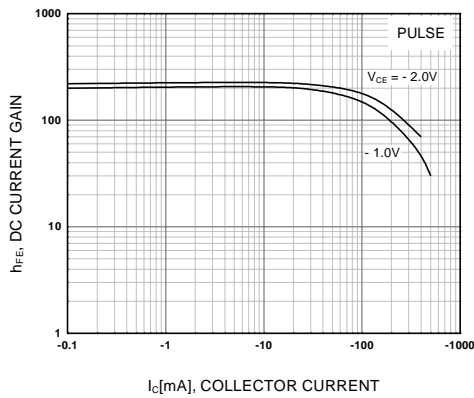


Figure 3. DC current Gain

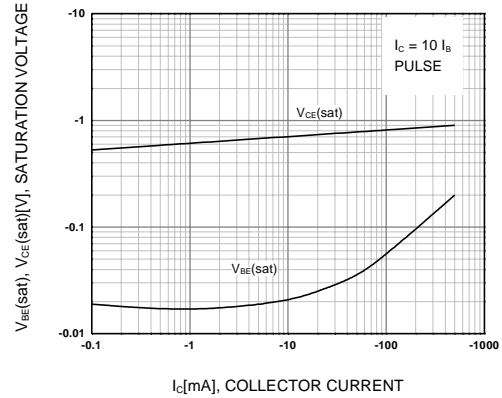


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

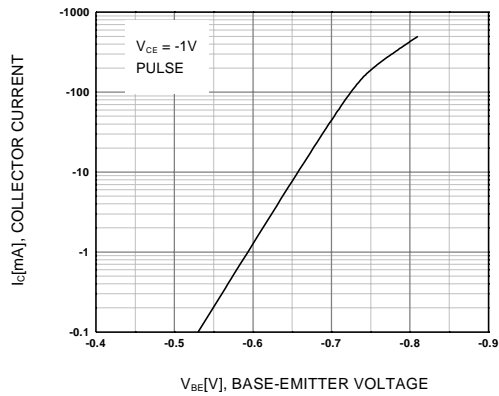


Figure 5. Base-Emitter On Voltage

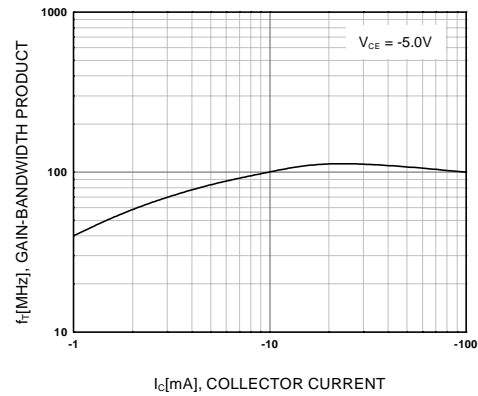


Figure 6. Gain Bandwidth Product

Typical Characteristics (Continued)

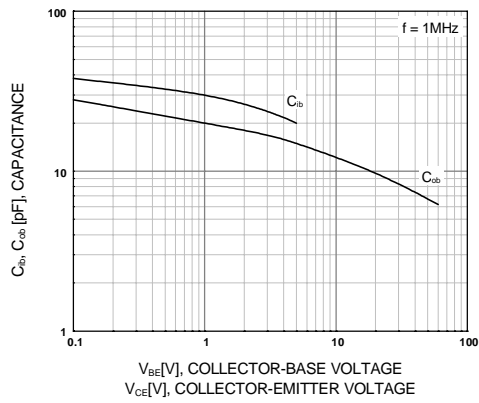


Figure 7. Input and Output Capacitance vs. Reverse Voltage

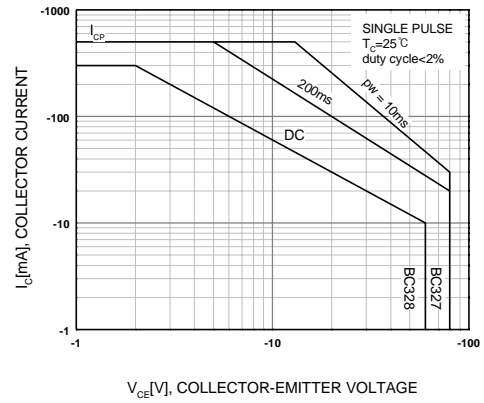


Figure 8. Safe Operating Area

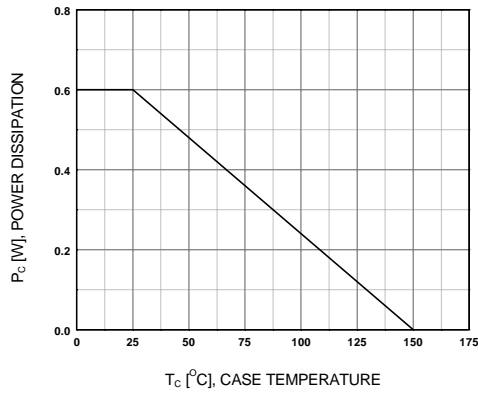
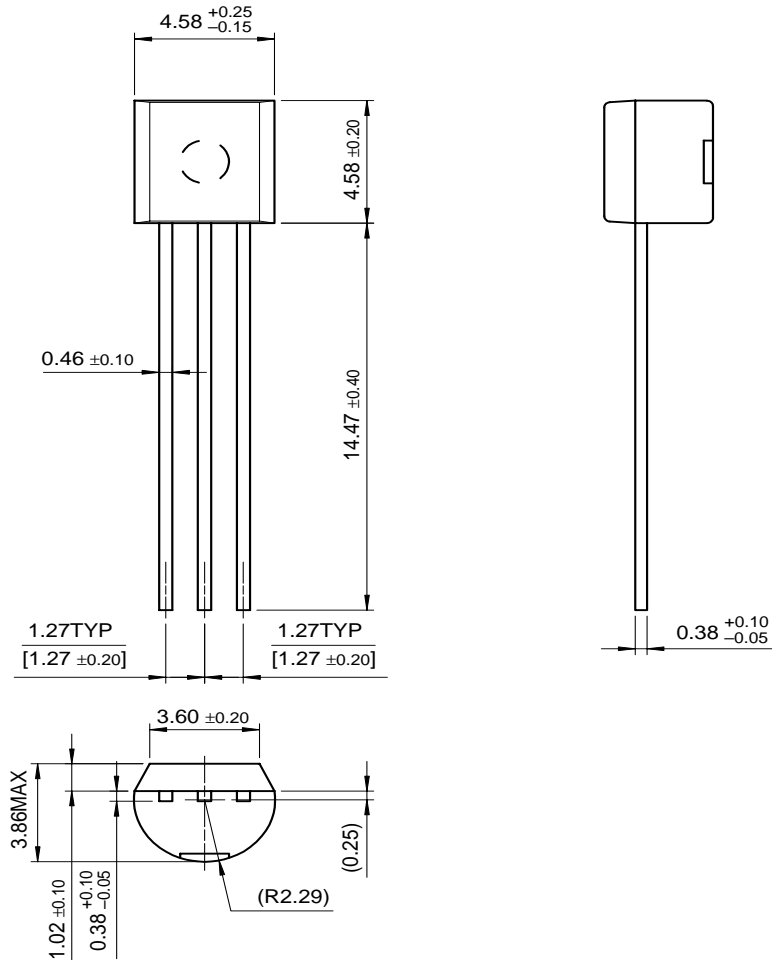


Figure 9. Power Derating

Package Dimensions

TO-92



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.

ACEx™	FAST®	OPTOPLANAR™	STAR*POWER™
Bottomless™	FASTr™	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:

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.

Fairchild Semiconductor

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

Home >> Find products >>

BC328
PNP Epitaxial Silicon Transistor

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

- Features
- Suitable for AF-Driver stages and low power output stages
 - Complement to BC337/BC338

[back to top](#)

Applications

Switching and Amplifier

[back to top](#)

Product status/pricing/package

Datasheet
[Download this datasheet](#)

PDF

[e-mail this datasheet](#)

[E-

This page
[Print version](#)

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](#)

Product	Product status	Pricing*	Package type	Leads	Package marking	Packing method
BC32816TA	Full Production	\$0.053	TO-92	3	N/A	TAPE REEL
BC32840BU	Full Production	\$0.053	TO-92	3	N/A	BULK
BC32816BU	Full Production	\$0.053	TO-92	3	N/A	BULK
BC32825TA	Full Production	\$0.053	TO-92	3	N/A	TAPE REEL
BC328	Full Production	\$0.078	TO-92	3	\$Y&3 BC328	BULK
BC32840TA	Full Production	\$0.053	TO-92	3	N/A	TAPE REEL
BC32825BU	Full Production	\$0.053	TO-92	3	N/A	BULK
BC32825	Full Production	\$0.078	TO-92	3	\$Y&3 BC328 -25	BULK

* 1,000 piece Budgetary Pricing

[back to top](#)

■

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

[© Copyright 2002 Fairchild Semiconductor](#)

Fairchild Semiconductor

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

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

BC327
PNP Epitaxial Silicon Transistor

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

Features

- Suitable for AF-Driver stages and low power output stages
- Complement to BC337/BC338

[back to top](#)

Applications

Switching and Amplifier

[back to top](#)

Product status/pricing/package

Datasheet
[Download this datasheet](#)



[e-mail this datasheet](#)



This page
[Print version](#)

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](#)

Product	Product status	Pricing*	Package type	Leads	Package marking	Packing method
BC32716TA	Full Production	\$0.058	TO-92	3	N/A	TAPE REEL
BC32740TA	Full Production	\$0.058	TO-92	3	N/A	TAPE REEL
BC32716BU	Full Production	\$0.058	TO-92	3	N/A	BULK
BC32725	Full Production	\$0.098	TO-92	3	\$Y&3 BC327 -25	BULK
BC32725TA	Full Production	\$0.058	TO-92	3	N/A	TAPE REEL
BC32725BU	Full Production	\$0.058	TO-92	3	N/A	BULK
BC327	Full Production	\$0.098	TO-92	3	\$Y&3 BC327	BULK
BC32740BU	Full Production	\$0.058	TO-92	3	N/A	BULK

* 1,000 piece Budgetary Pricing

[back to top](#)

■

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

[© Copyright 2002 Fairchild Semiconductor](#)
