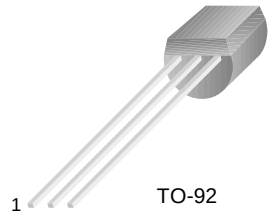
FAIRCHILD SEMICONDUCTOR®

BC327/328

Switching and Amplifier Applications

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



TO-92

1. Collector 2. Base 3. Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°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	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

Datasheet.Directory

Electrical Characteristics T_a=25°C unless otherwise noted

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

h_{FE} Classification

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

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Typical Characteristics

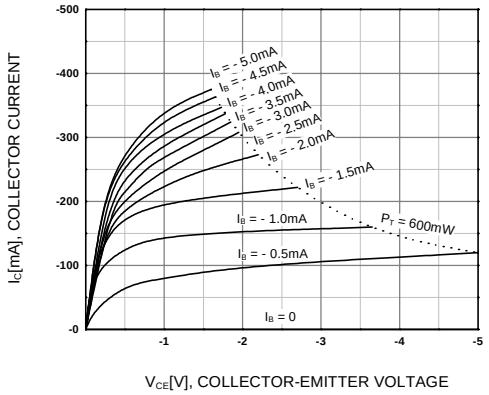

Figure 1. Static Characteristic

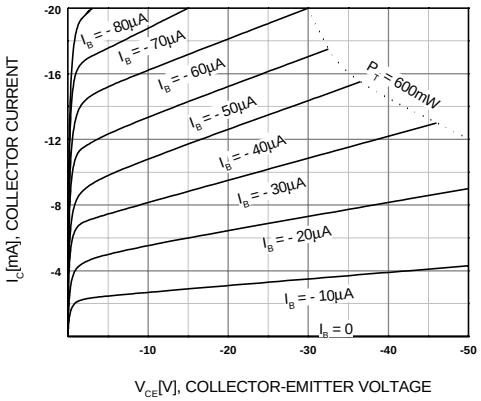

Figure 2. Static Characteristic

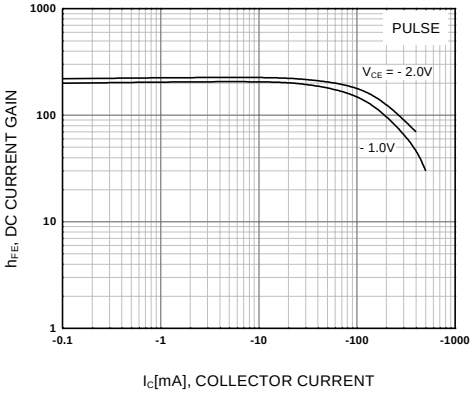

Figure 3. DC current Gain

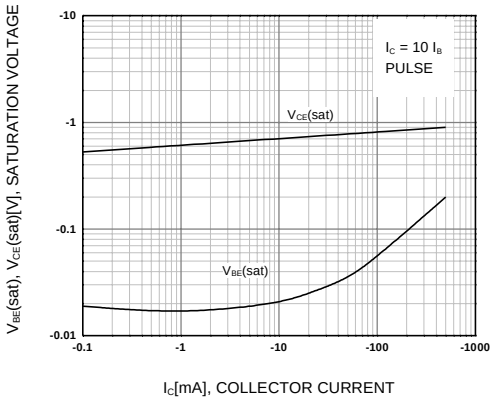

Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

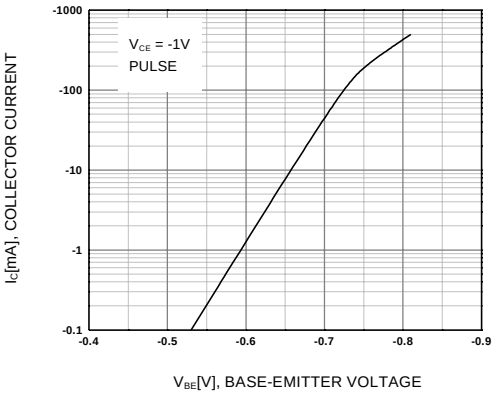

Figure 5. Base-Emitter On Voltage

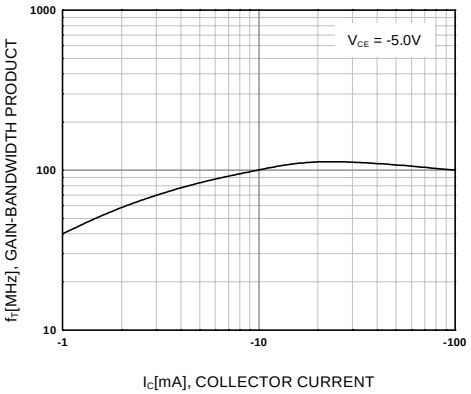

Figure 6. Gain Bandwidth Product

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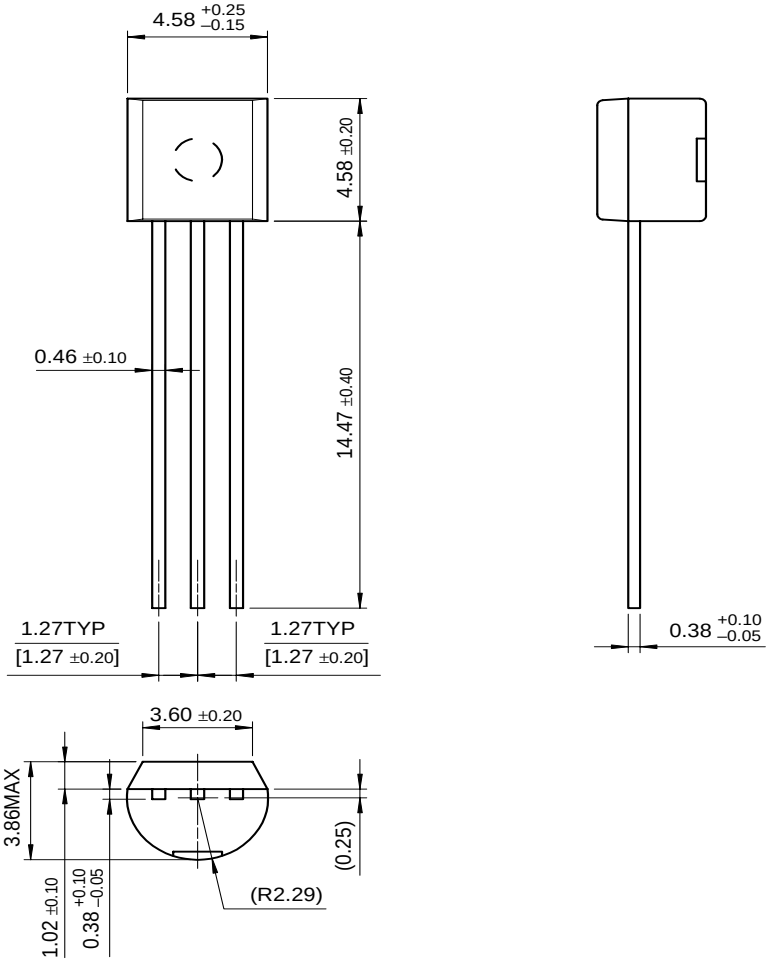
Package Dimensions

TO-92



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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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.

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BC328

PNP Epitaxial Silicon Transistor

Contents

•Features
•Applications
•Product status/pricing/packaging
•Order Samples
•Qualification Support

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/packaging BUY

BUY

Datasheet
Download this datasheet

e-mail this datasheet

This page
Print version

Related Links

Request samples
How to order products
Product Change Notices (PCNs)
Support
Sales support
Quality and reliability
Design center

Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
BC328	Full Production	Full Production	$0.083	TO-92	3	BULK	Line 1: **$Y** (Fairchild logo) &**Z** (Asm. Plant Code) &**3** (3-Digit Date Code) Line 2: BC328
BC32816BU	Full Production	Full Production	$0.0296	TO-92	3	BULK	Line 1: BC328 Line 2: 16 Line 3: -&3
BC32816TA	Full Production		$0.0296	TO-92	3	AMMO	Line 1: BC328 Line 2: 16 Line 3: -&3

		Full Production					
BC32825	Full Production	Full Production	$0.083	TO-92	3	BULK	Line 1: **$Y** (Fairchild logo) &**Z** (Asm. Plant Code) &**3** (3-Digit Date Code) Line 2: BC328 Line 3: -25
BC32825BU	Full Production	Full Production	$0.0296	TO-92	3	BULK	Line 1: BC328 Line 2: 25 Line 3: -&3
BC32825TA	Full Production	Full Production	$0.0296	TO-92	3	AMMO	Line 1: BC328 Line 2: 25 Line 3: -&3
BC32840BU	Full Production	Full Production	$0.0296	TO-92	3	BULK	Line 1: BC328 Line 2: 40 Line 3: -&3
BC32840TA	Full Production	Full Production	$0.0296	TO-92	3	AMMO	Line 1: BC328 Line 2: 40 Line 3: -&3
BC328BU	Full Production	Full Production	$0.0296	TO-92	3	BULK	Line 1: BC328 Line 3: -&3
BC328TA	Full Production	Full Production	$0.0296	TO-92	3	AMMO	Line 1: BC328 Line 3: -&3
BC328TAR	Full Production	Full Production	$0.0296	TO-92	3	AMMO	Line 1: BC328 Line 3: -&3
BC328TF	Full Production	Full Production	$0.0296	TO-92	3	TAPE REEL	Line 1: BC328 Line 3: -&3
BC328TFR	Full Production	Full Production	$0.0296	TO-92	3	TAPE REEL	Line 1: BC328 Line 3: -&3

* Fairchild 1,000 piece Budgetary Pricing
** A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a Fairchild distributor to obtain samples

Indicates product with Pb-free second-level interconnect. For more information click here.

Package marking information for product BC328 is available. Click here for more information .

back to top

Qualification Support

Click on a product for detailed qualification data

Product
BC328
BC32816BU
BC32816TA
BC32825
BC32825BU
BC32825TA
BC32840BU
BC32840TA
BC328BU
BC328TA
BC328TAR
BC328TF
BC328TFR

back to top

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