

## 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	$I_C = -10\text{mA}, I_B = 0$				
	: BC327		-45			V
	: BC328		-25			V
$BV_{CES}$	Collector-Emitter Breakdown Voltage	$I_C = -0.1\text{mA}, V_{BE} = 0$				
	: BC327		-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					
	: BC327	$V_{CE} = -45\text{V}, V_{BE} = 0$		-2	-100	nA
	: BC328	$V_{CE} = -25\text{V}, V_{BE} = 0$		-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			
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.7	V
$V_{BE}(\text{on})$	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

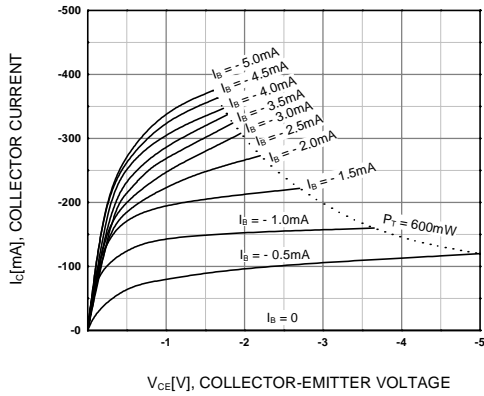


Figure 1. Static Characteristic

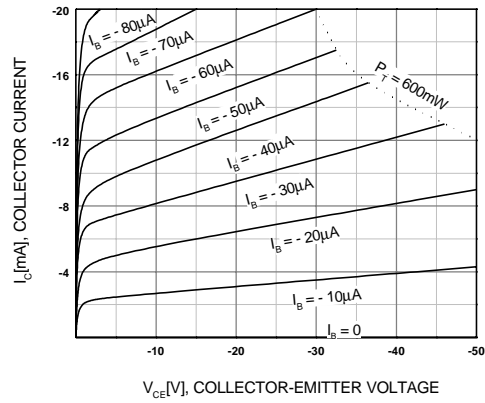


Figure 2. Static Characteristic

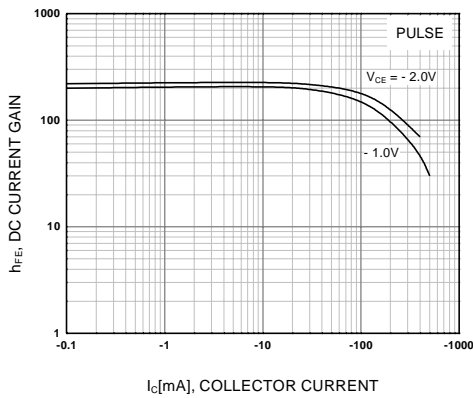


Figure 3. DC current Gain



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



Figure 5. Base-Emitter On Voltage

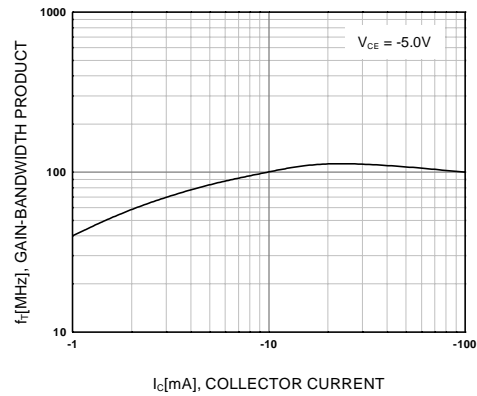
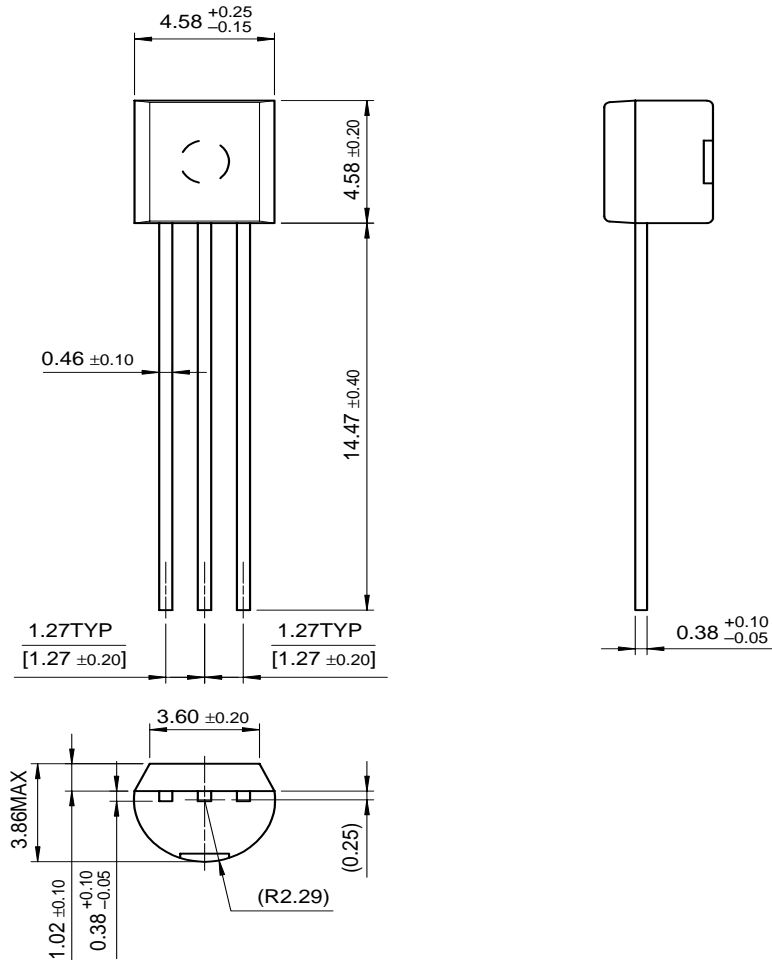


Figure 6. Gain Bandwidth Product

# Package Dimensions

BC327/328

## TO-92



Dimensions in Millimeters

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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.
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## BC328

PNP Epitaxial Silicon Transistor

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### Applications

#### Switching and Amplifier

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Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
BC328	Full Production	Full Production	\$0.083	<a href="#">TO-92</a>	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	<a href="#">TO-92</a>	3	BULK	Line 1: BC328 Line 2: 16 Line 3: -&3
BC32816TA	Full Production		\$0.0296	<a href="#">TO-92</a>	3	AMMO	Line 1: BC328 Line 2: 16 Line 3: -&3

		 Full Production					
BC32825	Full Production	 Full Production	\$0.083	<a href="#">TO-92</a>	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	<a href="#">TO-92</a>	3	BULK	Line 1: BC328 Line 2: 25 Line 3: -&3
BC32825TA	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	AMMO	Line 1: BC328 Line 2: 25 Line 3: -&3
BC32840BU	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	BULK	Line 1: BC328 Line 2: 40 Line 3: -&3
BC32840TA	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	AMMO	Line 1: BC328 Line 2: 40 Line 3: -&3
BC328BU	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	BULK	Line 1: BC328 Line 3: -&3
BC328TA	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	AMMO	Line 1: BC328 Line 3: -&3
BC328TAR	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	AMMO	Line 1: BC328 Line 3: -&3
BC328TF	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	3	TAPE REEL	Line 1: BC328 Line 3: -&3
BC328TFR	Full Production	 Full Production	\$0.0296	<a href="#">TO-92</a>	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](#).

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### Qualification Support

Click on a product for detailed qualification data

Product
<a href="#">BC328</a>
<a href="#">BC32816BU</a>
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<a href="#">BC32825</a>
<a href="#">BC32825BU</a>
<a href="#">BC32825TA</a>
<a href="#">BC32840BU</a>
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