

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	$I_C = -10\text{mA}, I_B = 0$	-45			V
			-25			V
BV_{CES}	Collector-Emitter Breakdown Voltage	$I_C = -0.1\text{mA}, V_{BE} = 0$	-50			V
			-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	$V_{CE} = -45\text{V}, V_{BE} = 0$ $V_{CE} = -25\text{V}, V_{BE} = 0$		-2	-100	nA
				-2	-100	nA
h_{FE1} h_{FE2}	DC Current Gain	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$ $V_{CE} = -1\text{V}, I_C = -300\text{mA}$	100		630	
			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

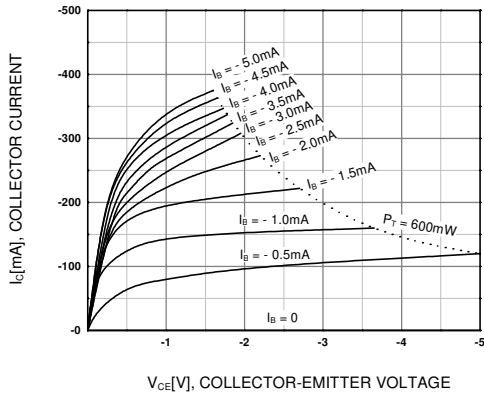


Figure 1. Static Characteristic

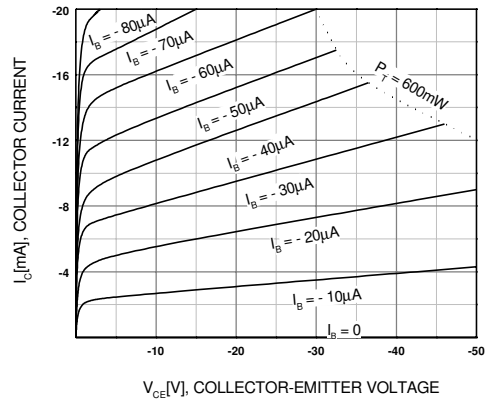


Figure 2. Static Characteristic

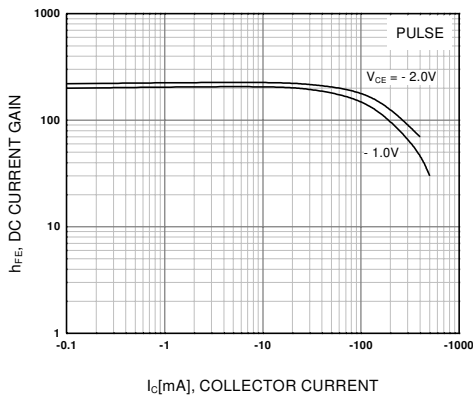


Figure 3. DC current Gain

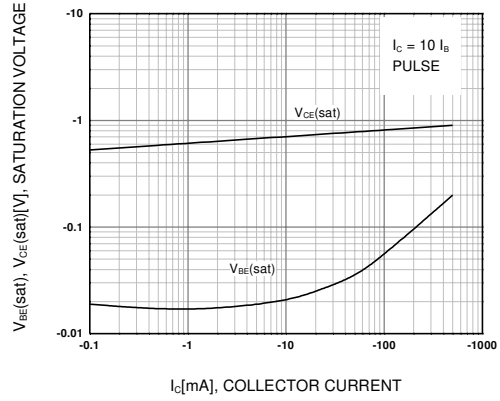


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

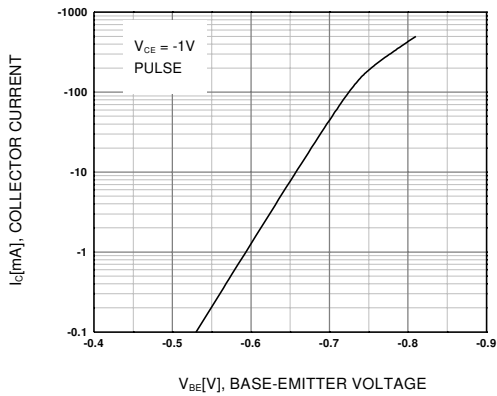


Figure 5. Base-Emitter On Voltage

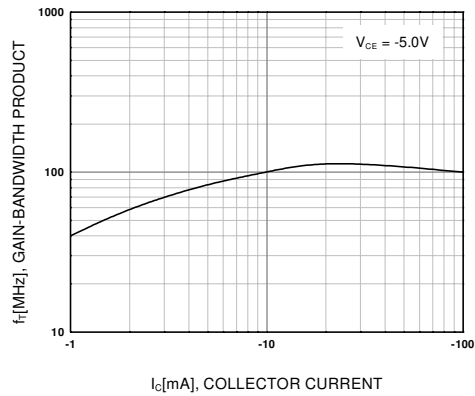
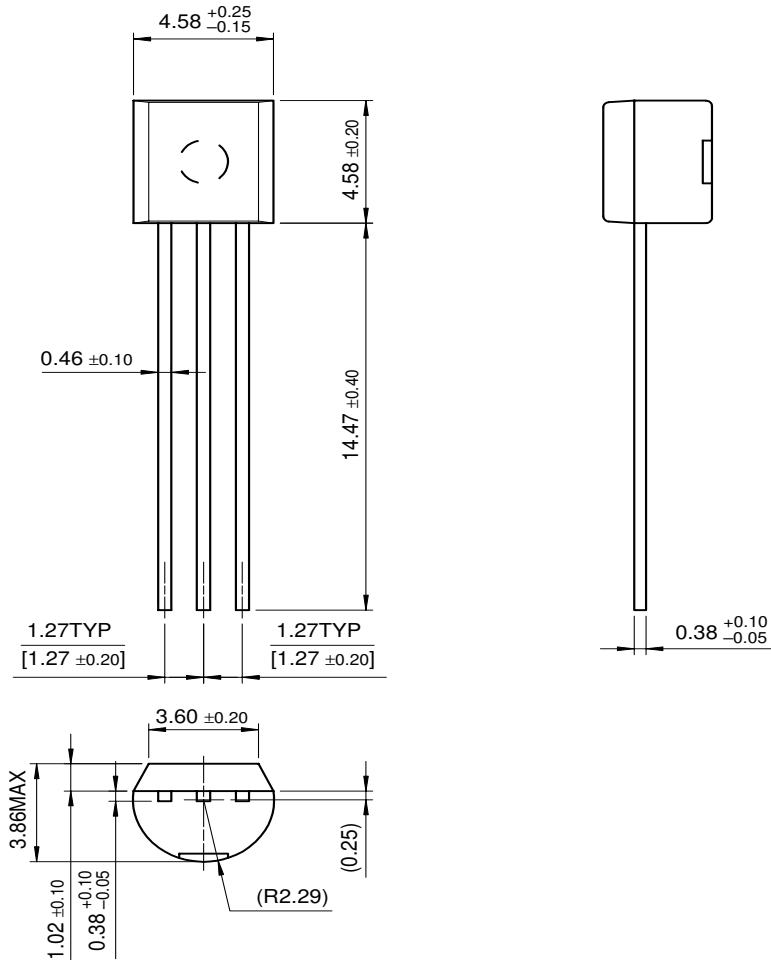


Figure 6. Gain Bandwidth Product

Package Dimensions

TO-92



Dimensions in Millimeters

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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

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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	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](#).

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Qualification Support

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Product
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BC32816BU
BC32816TA
BC32825
BC32825BU
BC32825TA
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BC32840TA
BC328BU
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