

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}	DC Current Gain	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100		630	
h_{FE2}		$V_{CE} = -1\text{V}, I_C = -300\text{mA}$	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

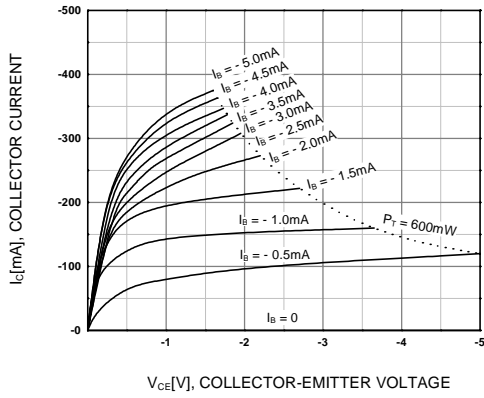


Figure 1. Static Characteristic



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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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.
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BC327

PNP Epitaxial Silicon Transistor

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Features

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- Complement to BC337/BC338

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Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
BC327	Full Production	Full Production	\$0.079	TO-92	3	BULK	Line 1: \$Y (Fairchild logo) &Z (Asm. Plant Code) &3 (3-Digit Date Code) Line 2: BC327
BC32716	Full Production	Full Production	\$0.079	TO-92	3	BULK	Line 1: \$Y (Fairchild logo) &Z (Asm. Plant Code) &3 (3-Digit Date Code) Line 2: BC327 Line 3: -16
BC32716BU	Full Production		\$0.0296	TO-92	3	BULK	Line 1: BC327 Line 2: 16 Line 3: -&3

							
BC32716TA	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 2: 16 Line 3: -&3
BC32716TAR	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 2: 16 Line 3: -&3
BC32716TF	Full Production		\$0.0296	TO-92	3	TAPE REEL	Line 1: BC327 Line 2: 16 Line 3: -&3
BC32716TFR	Full Production		\$0.0296	TO-92	3	TAPE REEL	Line 1: BC327 Line 2: 16 Line 3: -&3
BC32725	Full Production		\$0.079	TO-92	3	BULK	Line 1: \$Y (Fairchild logo) &Z (Asm. Plant Code) &3 (3-Digit Date Code) Line 2: BC327 Line 3: -25
BC32725BU	Full Production		\$0.0296	TO-92	3	BULK	Line 1: BC327 Line 2: 25 Line 3: -&3
BC32725TA	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 2: 25 Line 3: -&3
BC32725TAR	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 2: 25 Line 3: -&3
BC32725TF	Full Production		\$0.0296	TO-92	3	TAPE REEL	Line 1: BC327 Line 2: 25 Line 3: -&3
BC32725TFR	Full Production		\$0.0296	TO-92	3	TAPE REEL	Line 1: BC327 Line 2: 25 Line 3: -&3

BC32725_J18Z	Full Production		N/A	TO-92	3	BULK	Line 1: \$Y (Fairchild logo) & Z (Asm. Plant Code) & 3 (3-Digit Date Code) Line 2: BC327 Line 3: -25
BC32740BU	Full Production		\$0.0296	TO-92	3	BULK	Line 1: BC327 Line 2: 40 Line 3: -&3
BC32740TA	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 2: 40 Line 3: -&3
BC327ABU	Full Production		\$0.0296	TO-92	3	BULK	Line 1: BC327 Line 3: -&3
BC327BU	Full Production		\$0.0296	TO-92	3	BULK	Line 1: BC327 Line 3: -&3
BC327TA	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 3: -&3
BC327TAR	Full Production		\$0.0296	TO-92	3	AMMO	Line 1: BC327 Line 3: -&3
BC327TF	Full Production		\$0.0296	TO-92	3	TAPE REEL	Line 1: BC327 Line 3: -&3
BC327TFR	Full Production		\$0.0296	TO-92	3	TAPE REEL	Line 1: BC327 Line 3: -&3
BC327_NL	Full Production		N/A	TO-92	3	BULK	Line 1: \$Y (Fairchild logo) & Z (Asm. Plant Code) & 3 (3-Digit Date Code) Line 2: BC327

* 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 BC327 is available. [Click here for more information](#).

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Qualification Support

Click on a product for detailed qualification data

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BC32716BU
BC32716TA
BC32716TAR
BC32716TF
BC32716TFR
BC32725
BC32725BU
BC32725TA
BC32725TAR
BC32725TF
BC32725TFR
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