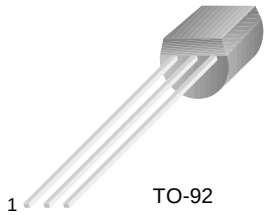
FAIRCHILD
SEMICONDUCTOR TM

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 Dissipation	625	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

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	IE= -10μA, I_C=0	-5			V
I_{CES}	Collector Cut-off Current					
	: BC307	V_{CE}= -45V, V_{BE}=0		-2	-100	nA
	: BC338	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-

Typical Characteristics

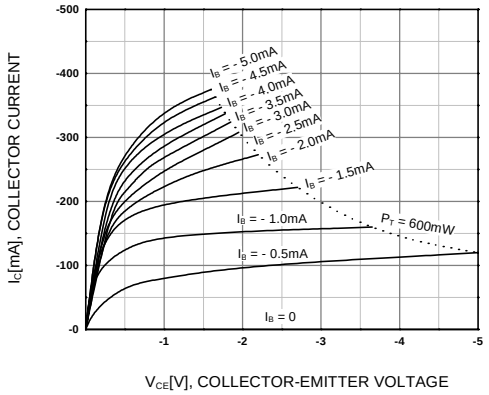


Figure 1. Static Characteristic

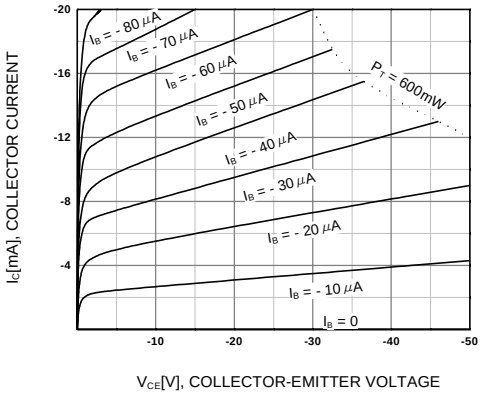


Figure 2. Static Characteristic

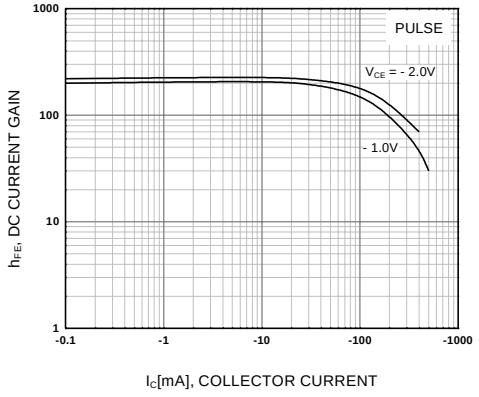


Figure 3. DC current Gain

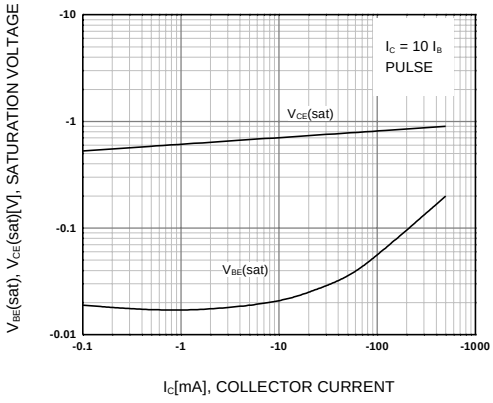


Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

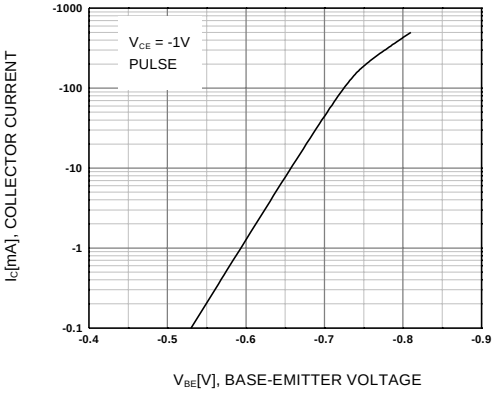


Figure 5. Base-Emitter On Voltage

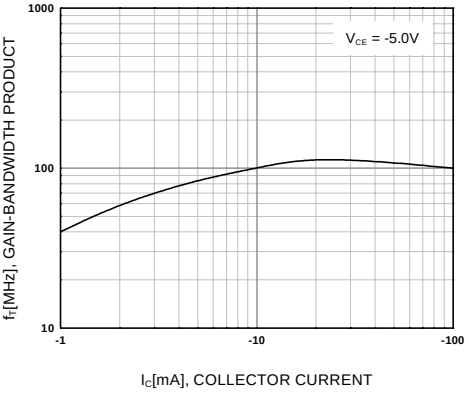


Figure 6. Gain Bandwidth Product

Typical Characteristics (Continued)

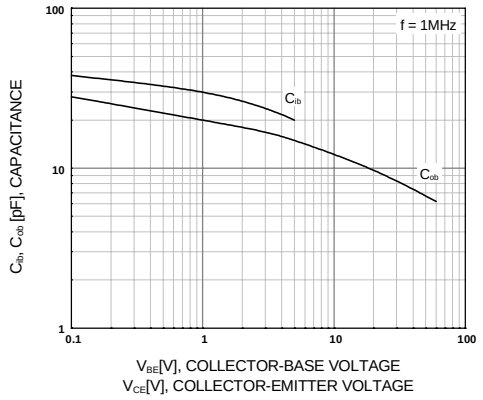


Figure 7. Input and Output Capacitance vs. Reverse Voltage

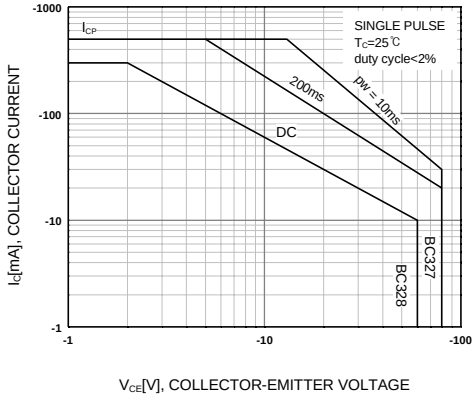


Figure 8. Safe Operating Area

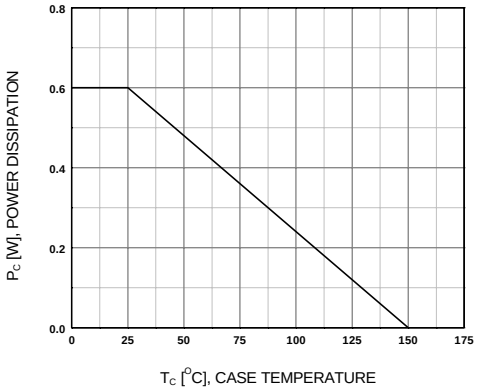
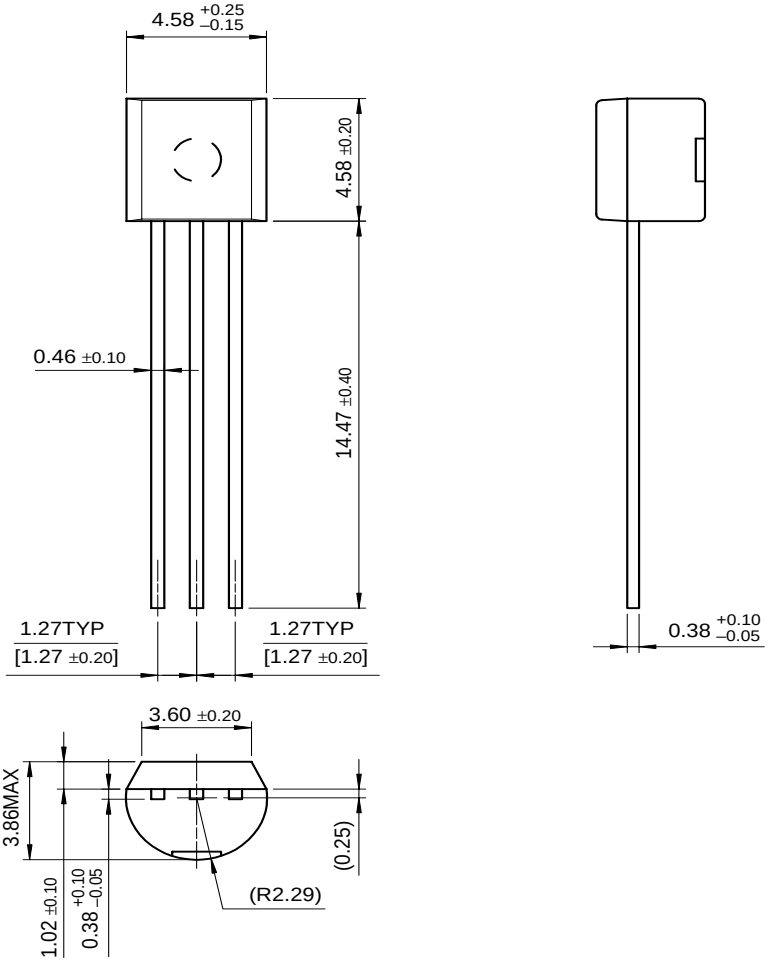


Figure 9. Power Derating

Package Demensions

TO-92



Dimensions in Millimeters

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