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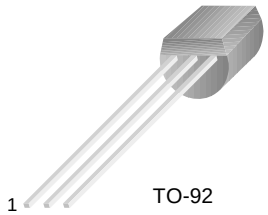
SEMICONDUCTOR TM

BC327/328

Switching and Amplifier Applications

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



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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

Datasheet.Live

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-

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Typical Characteristics

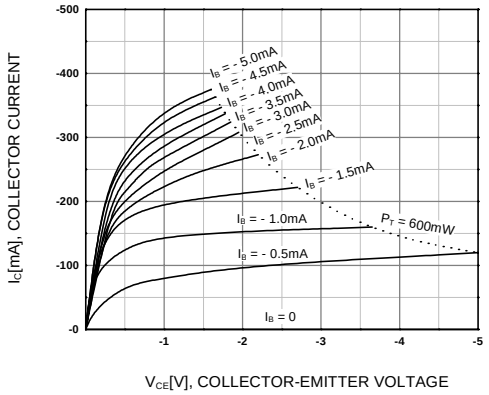

Figure 1. Static Characteristic

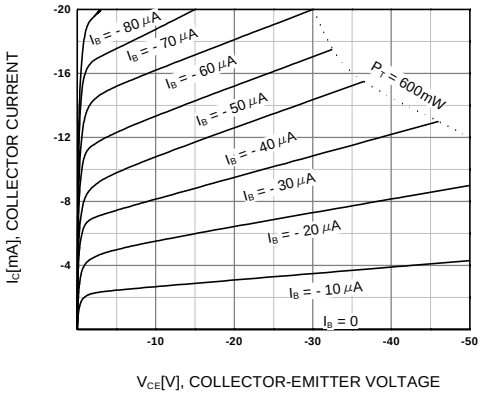

Figure 2. Static Characteristic

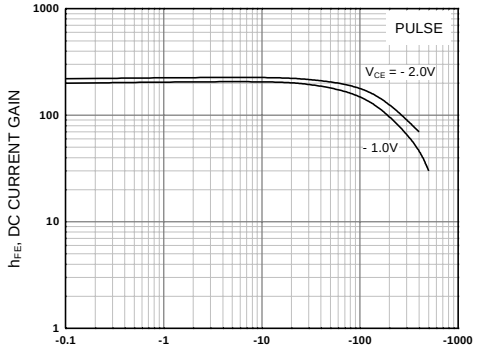

Figure 3. DC current Gain

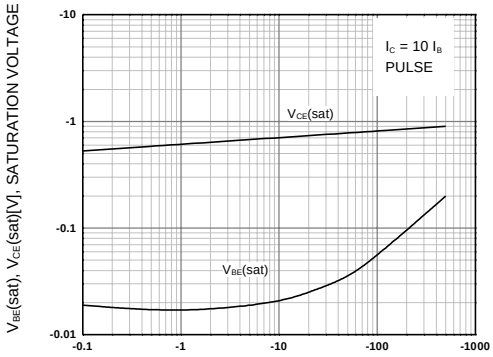

Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

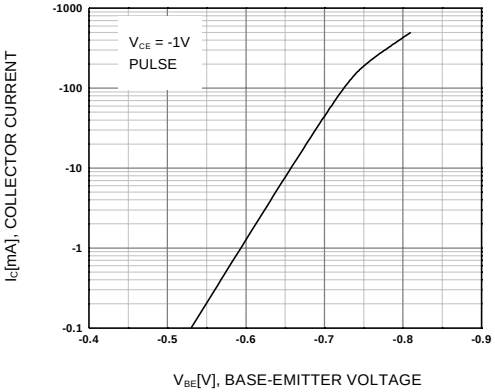

Figure 5. Base-Emitter On Voltage

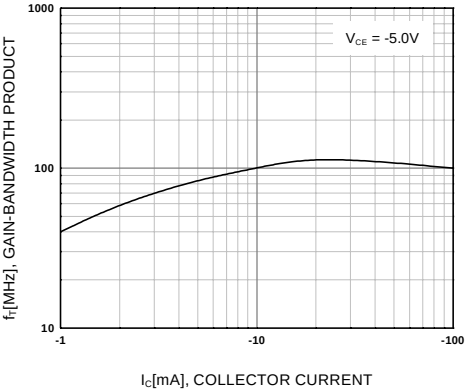

Figure 6. Gain Bandwidth Product

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Typical Characteristics (Continued)

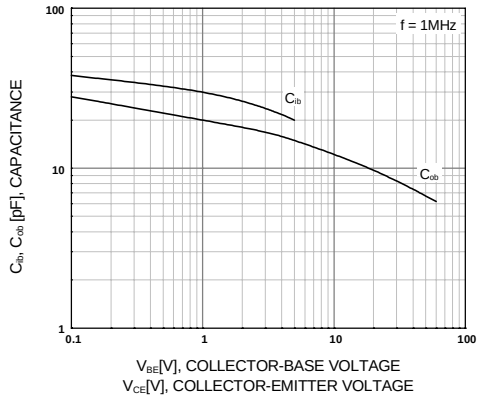

Figure 7. Input and Output Capacitance vs. Reverse Voltage

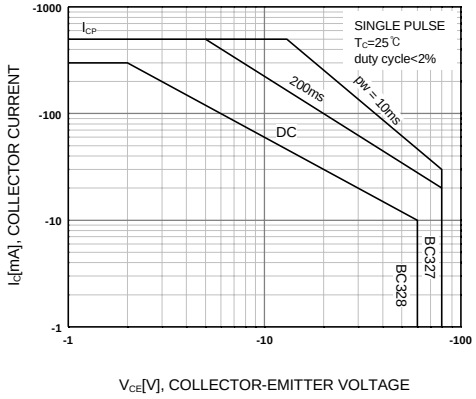

Figure 8. Safe Operating Area

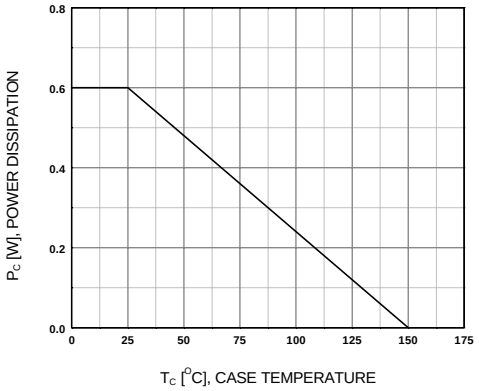

Figure 9. Power Derating

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Package Demensions

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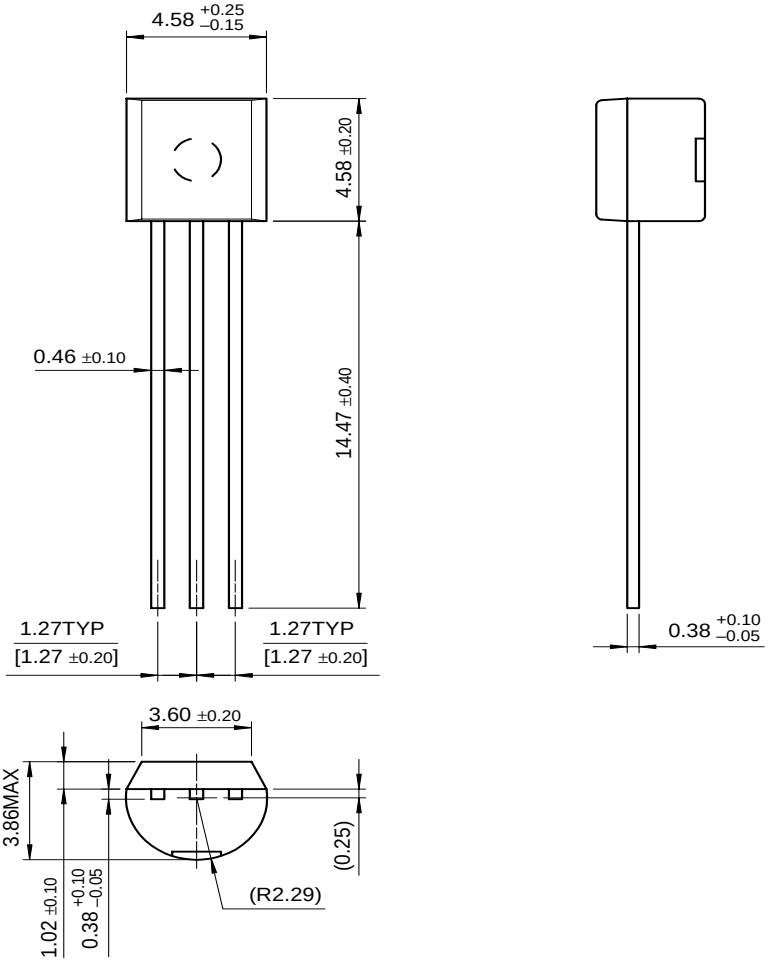

Dimensions in Millimeters

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