

BC327/328

Switching and Amplifier Applications

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



1. Collector 2. Base 3. Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings Ta=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 Power 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.	Тур.	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	$I_E = -10\mu A, I_C = 0$	-5			V
I _{CES}	Collector Cut-off Current					
	: BC327	$V_{CE} = -45V, V_{BE} = 0$		-2	-100	nA
	: BC328	V_{CE} = -25V, V_{BE} =0		-2	-100	nA
h _{FE1}	DC Current Gain	V _{CE} = -1V, I _C = -100mA	100		630	
h_{FE2}		$V_{CE} = -1V, I_{C} = -300 \text{mA}$	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

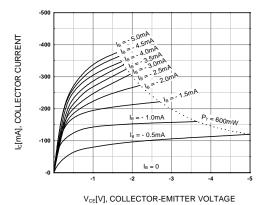


Figure 1. Static Characteristic

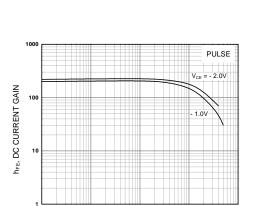


Figure 3. DC current Gain

I_C[mA], COLLECTOR CURRENT

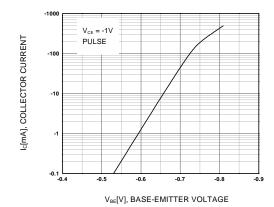
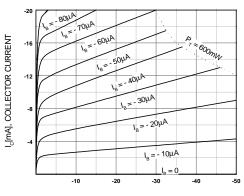


Figure 5. Base-Emitter On Voltage



 $\mathbf{V}_{\text{CE}}[\mathbf{V}]\text{, COLLECTOR-EMITTER VOLTAGE}$

Figure 2. Static Characteristic

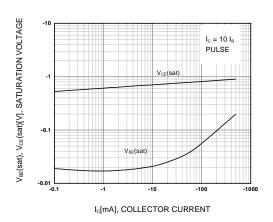


Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

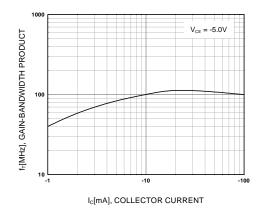
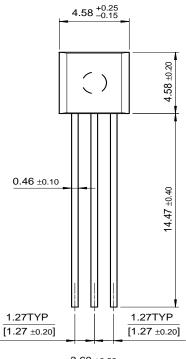
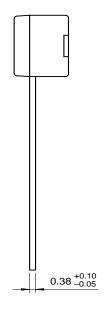


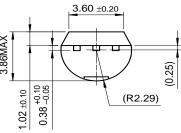
Figure 6. Gain Bandwidth Product

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