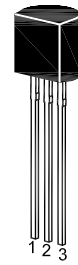


BC327...BC328

PNP Silicon Epitaxial Planar Transistors

Features

- These types are subdivided into three groups -16, -25 and -40, according to their DC current gain.



1. Collector 2. Base 3. Emitter
TO-92 Plastic Package

Applications

- For switching and amplifier applications

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	BC327	BC328	Unit
Collector Base Voltage	$-V_{CB0}$	50	30	V
Collector Emitter Voltage	$-V_{CEO}$	45	25	V
Emitter Base Voltage	$-V_{EBO}$	5		V
Collector Current	$-I_C$	800		mA
Peak Collector Current	$-I_{CM}$	1		A
Total Power Dissipation	P_{tot}	625		mW
Junction Temperature	T_j	150		$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150		$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	200	$^\circ\text{C/W}$

BC327...BC328

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit		
DC Current Gain							
at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$	Current Gain Group	-16	h_{FE}	100	-	250	-
		-25	h_{FE}	160	-	400	-
		-40	h_{FE}	250	-	630	-
at $-V_{CE} = 1\text{ V}$, $-I_C = 300\text{ mA}$		-16	h_{FE}	60	-	-	-
		-25	h_{FE}	100	-	-	-
		-40	h_{FE}	170	-	-	-
Collector Base Cutoff Current							
at $-V_{CB} = 45\text{ V}$	BC327	$-I_{CBO}$	-	-	100	nA	
at $-V_{CB} = 25\text{ V}$	BC328		-	-	100		
Collector Base Breakdown Voltage	BC327	$-V_{(BR)CBO}$	50	-	-	V	
at $-I_C = 100\text{ }\mu\text{A}$	BC328		30	-	-		
Collector Emitter Breakdown Voltage	BC327	$-V_{(BR)CEO}$	45	-	-	V	
at $-I_C = 10\text{ mA}$	BC328		25	-	-		
Emitter Base Breakdown Voltage		$-V_{(BR)EBO}$	5	-	-	V	
at $-I_E = 100\text{ }\mu\text{A}$							
Collector Emitter Saturation Voltage		$-V_{CE(sat)}$	-	-	0.7	V	
at $-I_C = 500\text{ mA}$, $-I_B = 50\text{ mA}$							
Base Emitter On Voltage		$-V_{BE(on)}$	-	-	1.2	V	
at $-V_{CE} = 1\text{ V}$, $-I_C = 300\text{ mA}$							
Gain Bandwidth Product		f_T	-	100	-	MHz	
at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$, $f = 50\text{ MHz}$							
Collector Base Capacitance		C_{cbo}	-	12	-	pF	
at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$							

BC327...BC328

Electrical Characteristics Curves

Fig. 1 Power Derating Curve

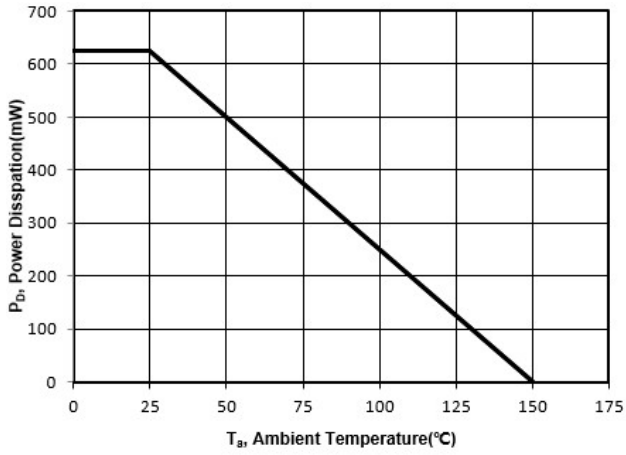


Fig. 2 Output Characteristics Curve

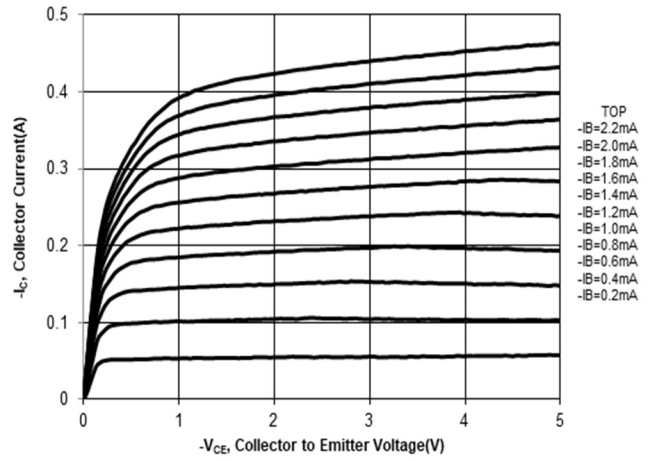


Fig. 3 Collector Current vs. Base to Emitter Voltage

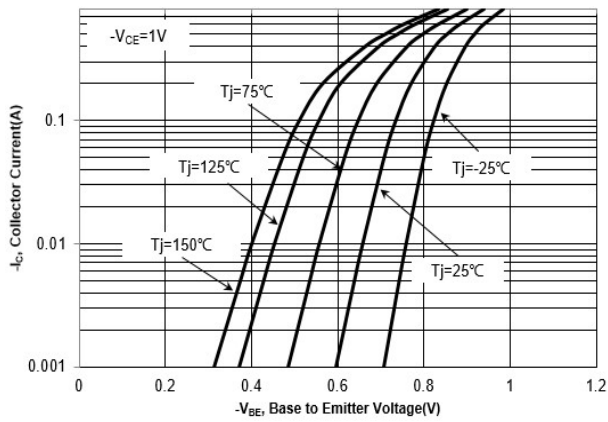
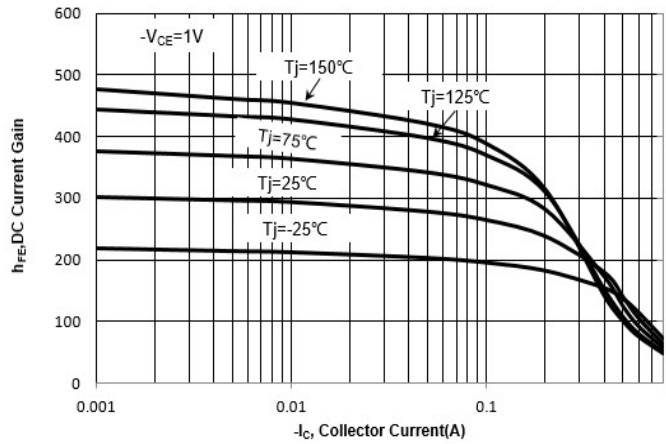


Fig. 4 DC Current Gain vs. Collector Current



BC327...BC328

Electrical Characteristics Curves

Fig. 5 V_{BESAT} vs. Collector Current

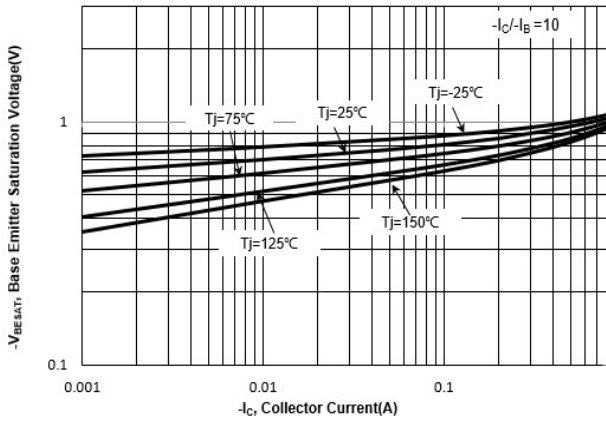


Fig. 6 V_{CESAT} vs. Collector Current

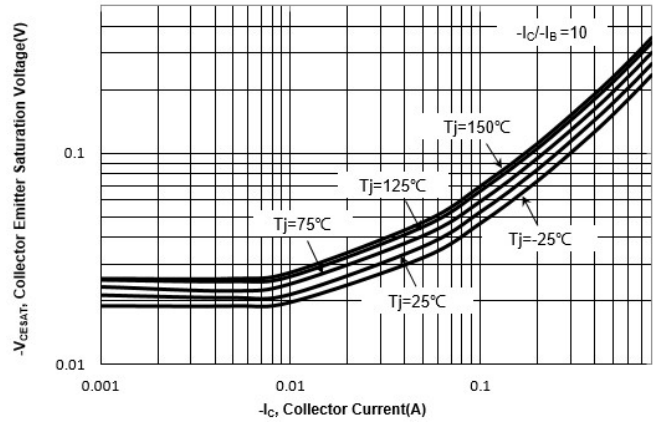


Fig. 7 Output Capacitance

