

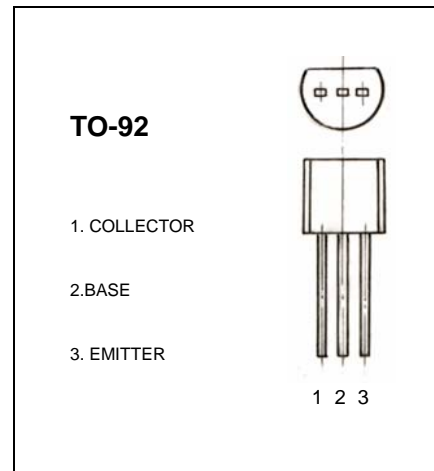
## BC327/ BC328 TRANSISTOR (PNP)

### FEATURES

Power dissipation

### MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	<b>BC327</b>	-50
		<b>BC328</b>	-30
$V_{CEO}$	Collector-Emitter Voltage	<b>BC327</b>	-45
		<b>BC328</b>	-25
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-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 ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-50			V
<b>BC327</b>			-30			
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C = -10\text{mA}, I_B = 0$	-45			V
<b>BC327</b>			-25			
Emitter-base breakdown voltage	$V_{EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -45\text{V}, I_E = 0$ $V_{CB} = -25\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
<b>BC327</b>			-0.1			
Collector cut-off current	$I_{CEO}$	$V_{CE} = -40\text{V}, I_B = 0$ $V_{CE} = -20\text{V}, I_B = 0$			-0.2	$\mu\text{A}$
<b>BC327</b>			-0.2			
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100		630	
	$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -300\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.2	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = -1\text{V}, I_C = -300\text{mA}$			-1.2	V
Transition frequency	$f_T$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $f = 100\text{MHz}$	260			MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0$ $f = 1\text{MHz}$		12		pF

### CLASSIFICATION OF $h_{FE}$

Rank	16	25	40
Range	100-250	160-400	250-630

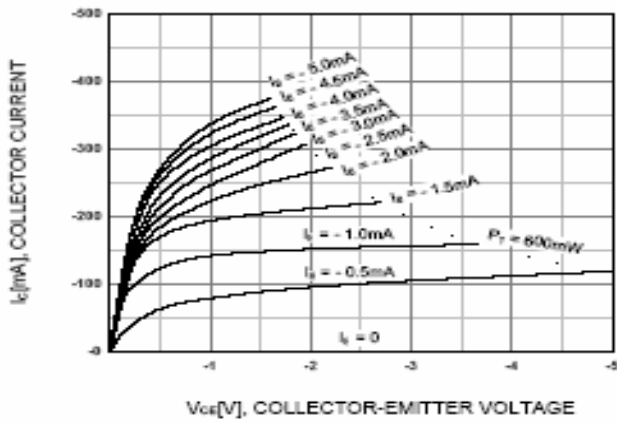


Figure 1. Static Characteristic

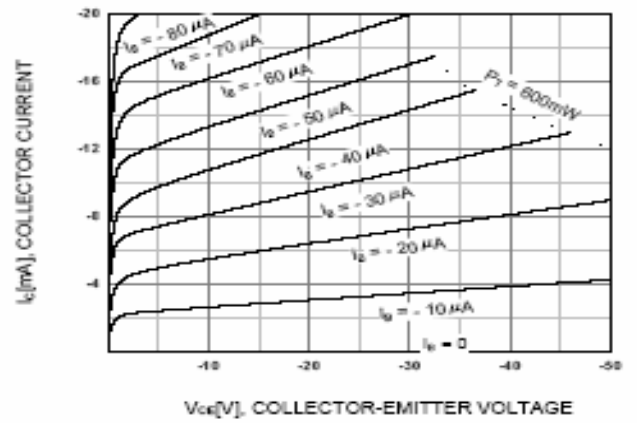


Figure 2. Static Characteristic

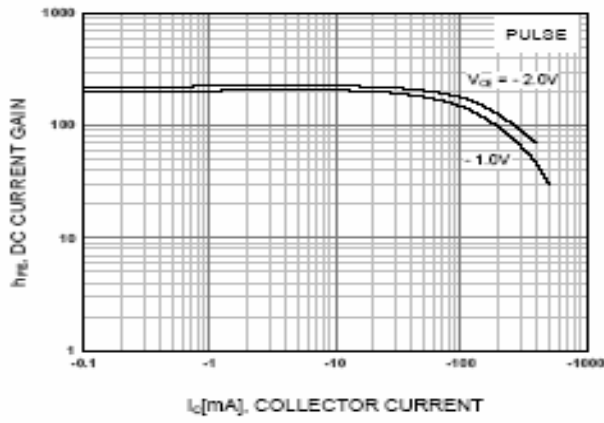


Figure 3. DC current Gain

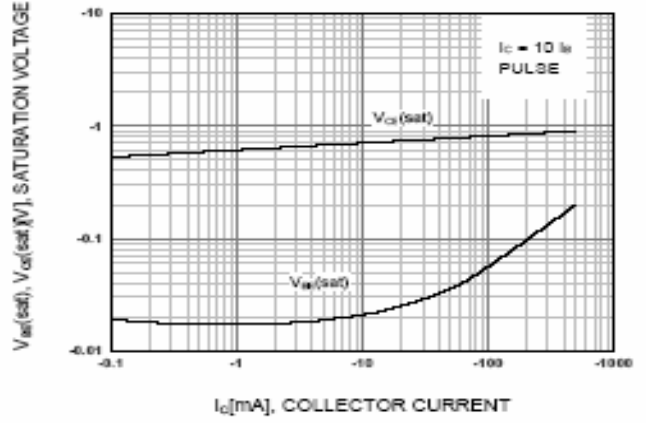


Figure 4. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

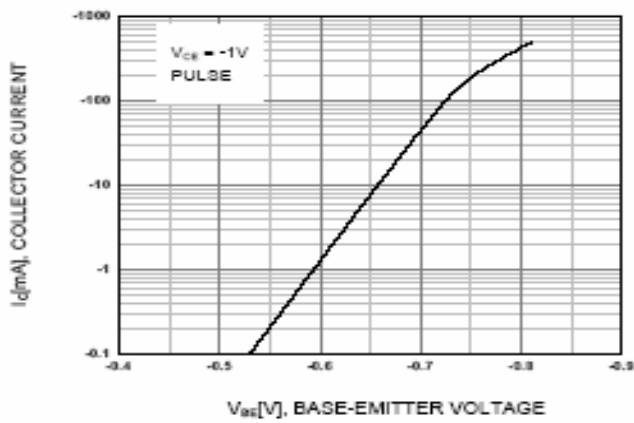


Figure 5. Base-Emitter On Voltage

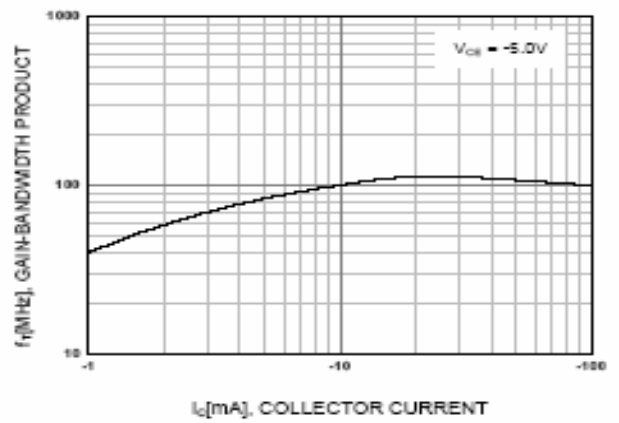


Figure 6. Gain Bandwidth Product

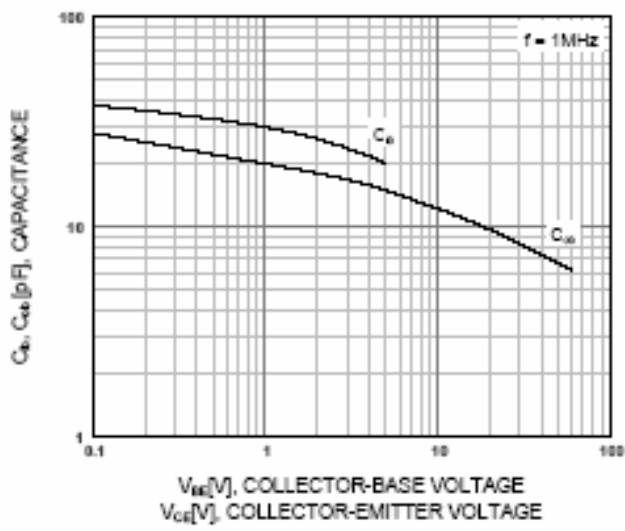


Figure 7. Input and Output Capacitance vs. Reverse Voltage

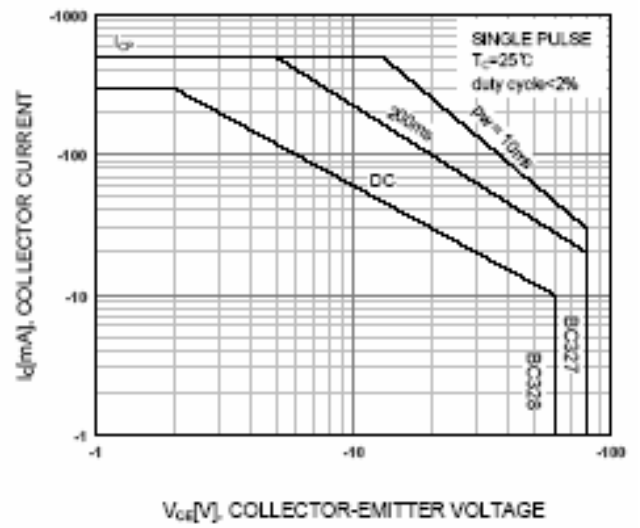


Figure 8. Safe Operating Area