



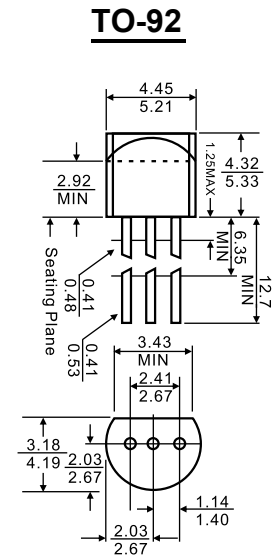
1. COLLECTOR
2. BASE
3. EMITTER

## Features

- ◇ Power dissipation

### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V <sub>CB0</sub>	Collector-Base Voltage <b>BC327</b>	-50	V
	<b>BC328</b>	-30	
V <sub>CEO</sub>	Collector-Emitter Voltage <b>BC327</b>	-45	V
	<b>BC328</b>	-25	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-800	mA
P <sub>C</sub>	Collector Power Dissipation	625	mW
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C



Dimensions in inches and (millimeters)

### ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>CB0</sub>	I <sub>C</sub> = -100uA, I <sub>E</sub> =0	-50			V
			-30			
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> =0	-45			V
			-25			
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -10uA, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -45 V, I <sub>E</sub> =0 V <sub>CB</sub> = -25V, I <sub>E</sub> =0			-0.1	uA
					-0.1	
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = -40 V, I <sub>B</sub> =0 V <sub>CE</sub> = -20 V, I <sub>B</sub> =0			-0.2	uA
					-0.2	
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -4 V, I <sub>C</sub> =0			-0.1	uA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =-1 V, I <sub>C</sub> = -100mA	100		630	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =-1 V, I <sub>C</sub> = -300mA	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> = -50mA			-0.7	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -500mA, I <sub>B</sub> =-50mA			-1.2	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =-1 V, I <sub>C</sub> = -300mA			-1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA f = 100MHz	260			MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0 f=1MHz		12		pF

### CLASSIFICATION OF h<sub>FE</sub>

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

### Typical Characteristics

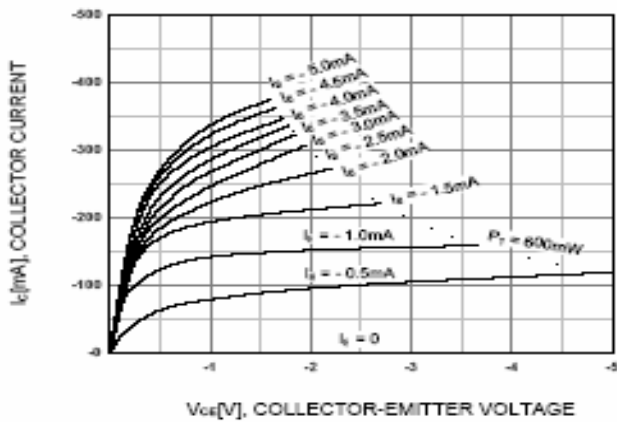


Figure 1. Static Characteristic

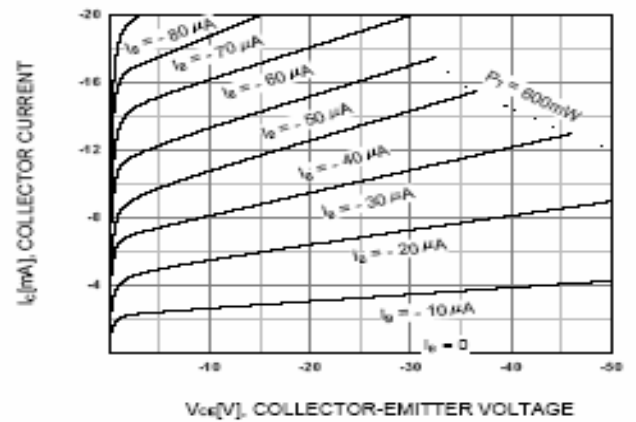


Figure 2. Static Characteristic

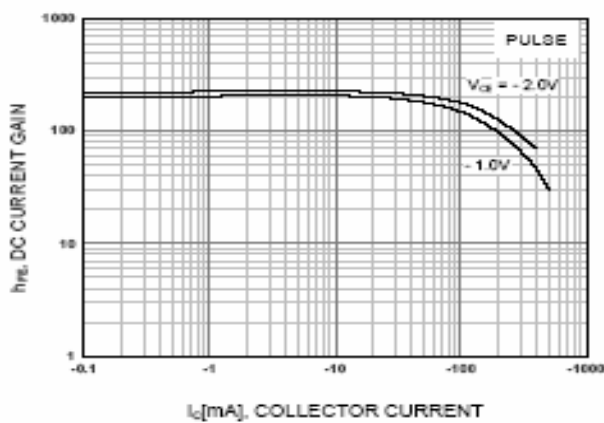


Figure 3. DC current Gain

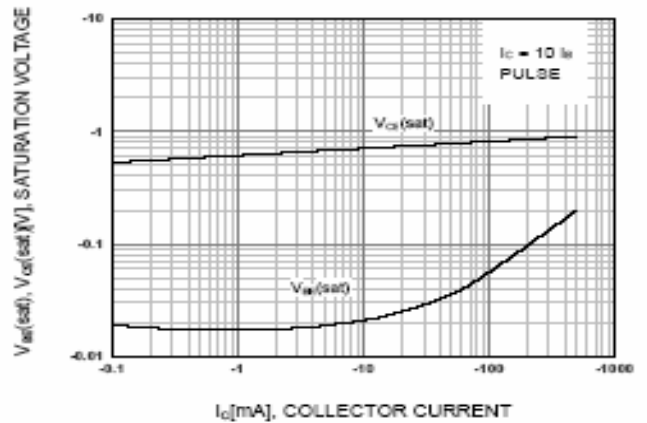


Figure 4. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

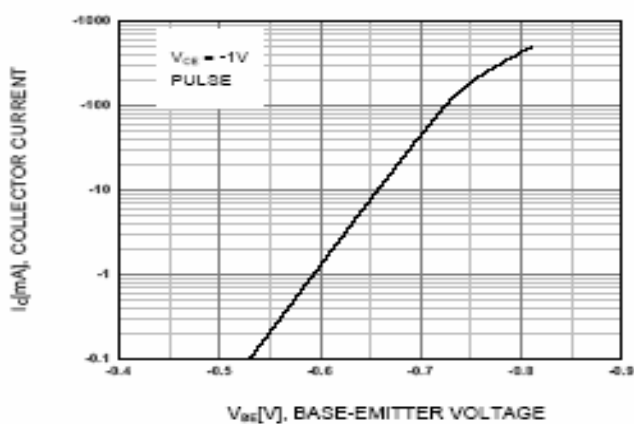


Figure 5. Base-Emitter On Voltage

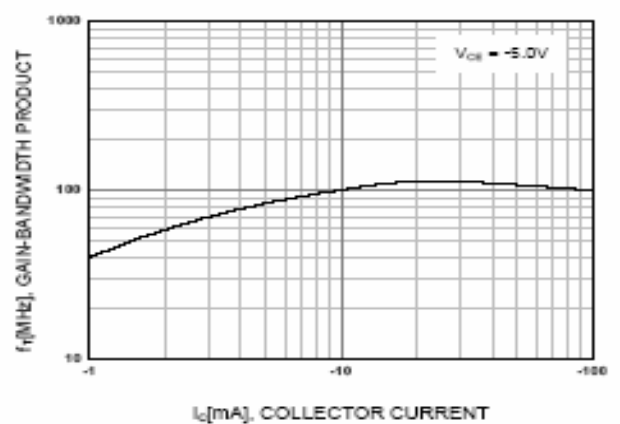


Figure 6. Gain Bandwidth Product

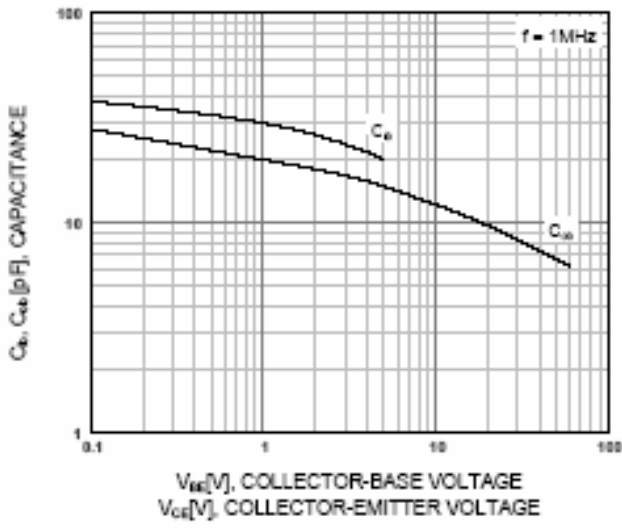


Figure 7. Input and Output Capacitance vs. Reverse Voltage

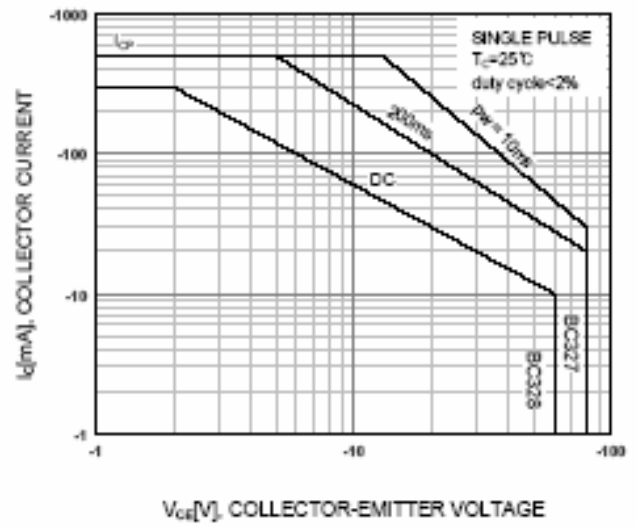


Figure 8. Safe Operating Area