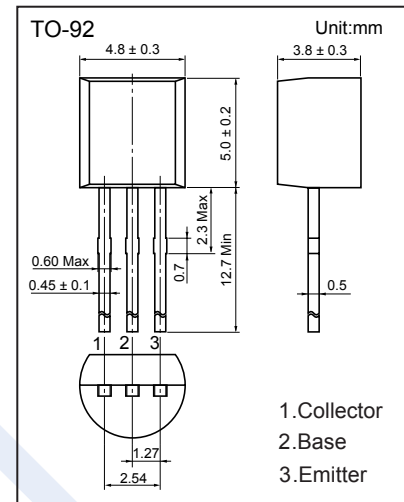
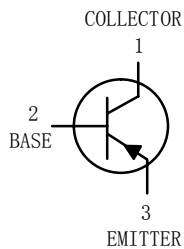


## PNP Transistors

## BC327 (KC327)

## ■ Features

- Collector Current Capability  $I_c = -0.8A$
- Collector Emitter Voltage  $V_{CEO} = -45V$
- Pb-Free Packages are Available

■ Absolute Maximum Ratings  $T_a = 25^\circ C$ 

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-50	V
Collector - Emitter Voltage	$V_{CE0}$	-45	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_c$	-0.8	A
Collector Power Dissipation @ $T_a = 25^\circ C$	$P_c$	625	mW
Derate above $T_a = 25^\circ C$		5	mW/ $^\circ C$
Collector Power Dissipation @ $T_c = 25^\circ C$	$P_c$	1.5	W
Derate above $T_a = 25^\circ C$		12	mW/ $^\circ C$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	200	$^\circ C/W$
Thermal Resistance, Junction to Case	$R_{\theta JC}$	83.3	
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature range	$T_{stg}$	-55 to 150	

### PNP Transistors

### BC327 (KC327)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> = -100 μA, I <sub>E</sub> =0	-50			V
Collector- emitter breakdown voltage	V <sub>CE0</sub>	I <sub>c</sub> = -10 mA, I <sub>B</sub> =0	-45			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = -100 μA, I <sub>C</sub> =0	-5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -30 V, I <sub>E</sub> =0			-100	nA
Collector- emittercut-off current	I <sub>CES</sub>	V <sub>CE</sub> = -45 V, I <sub>E</sub> =0			-100	
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = -4V, I <sub>C</sub> =0			-100	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-50mA			-0.7	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-50mA			-1.2	
Base-emitter on voltage	V <sub>BE(on)</sub>	V <sub>CE</sub> = -1 V, I <sub>C</sub> = -300mA			-1.2	
DC current gain	BC327 BC327-16 BC327-25 BC327-40	h <sub>FE</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -100mA	100		630
				100		250
				160		400
				250		630
				40		
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0,f=1MHz		11		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA,f=100MHz		260		MHz

■ Typical Characteristics

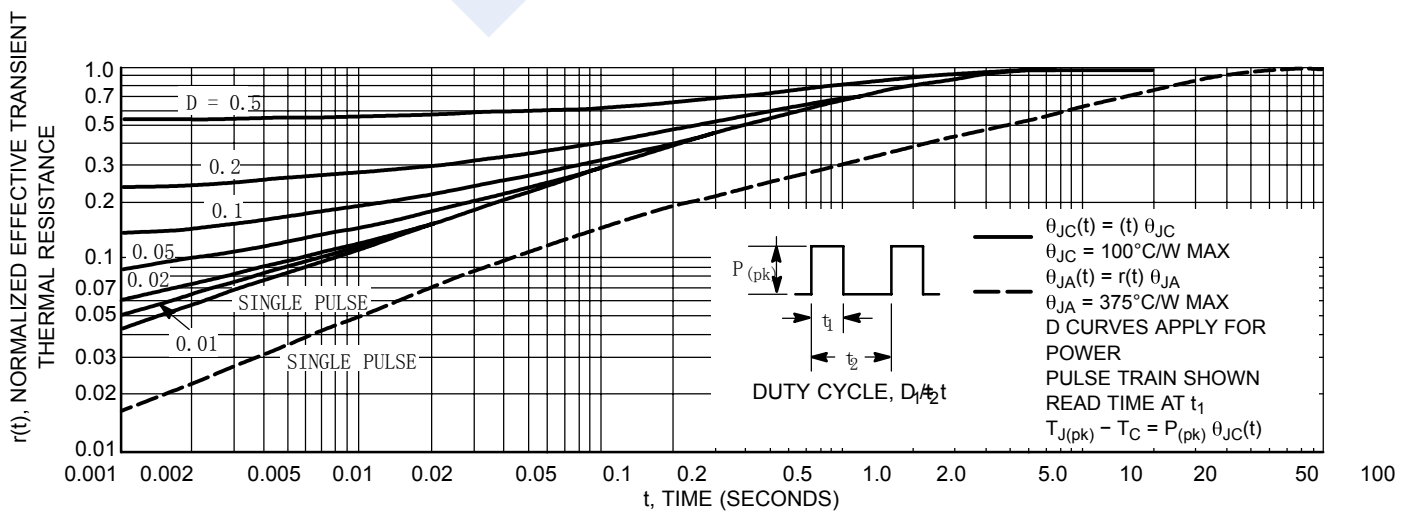


Figure 1. Thermal Response

# PNP Transistors

## BC327 (KC327)

### ■ Typical Characteristics

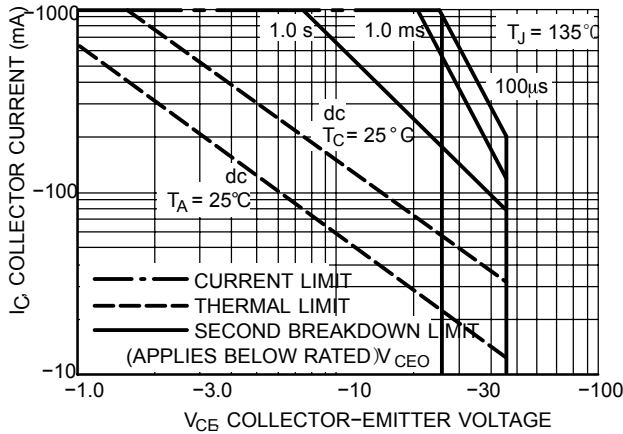


Figure 2. Active Region - Safe Operating Area

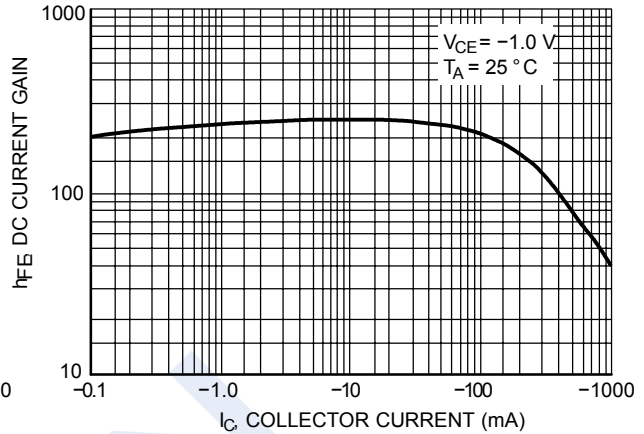


Figure 3. DC Current Gain

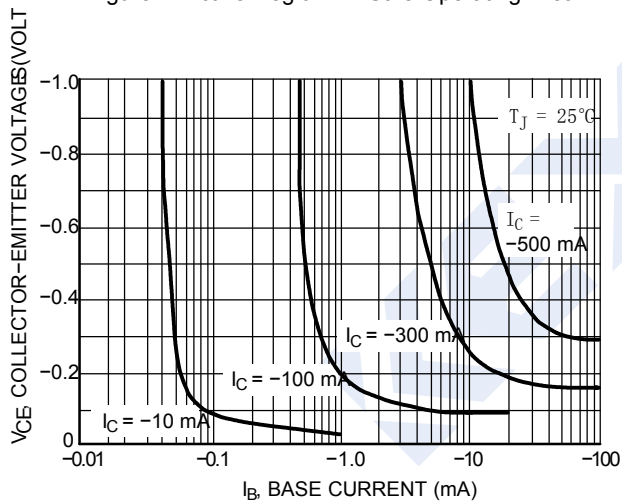


Figure 4. Saturation Region

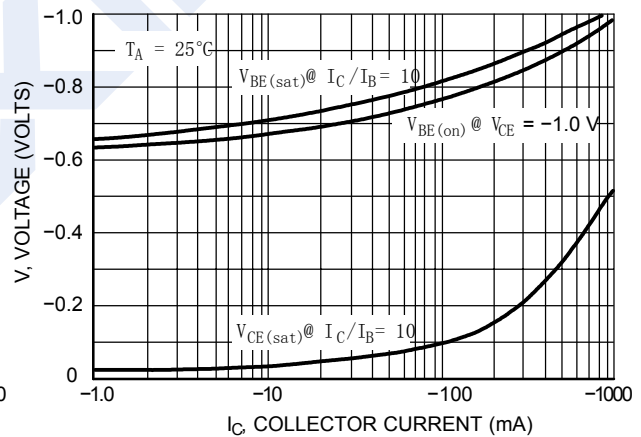


Figure 5. "On" Voltages

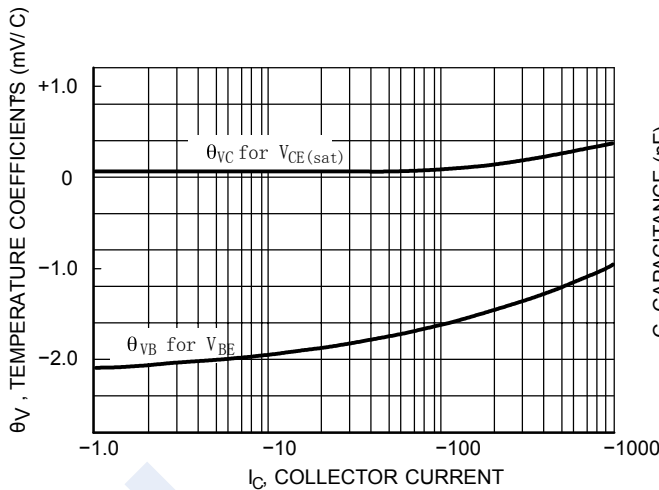


Figure 6. Temperature Coefficients

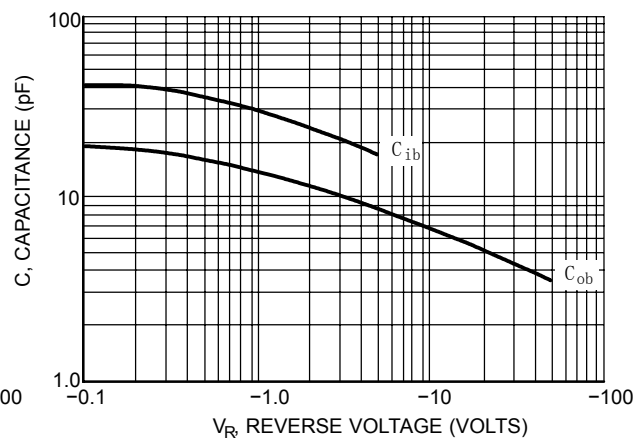


Figure 7. Capacitances