



BC327/BC328

TRANSISTOR (PNP)

TO-92

FEATURES

- Power dissipation

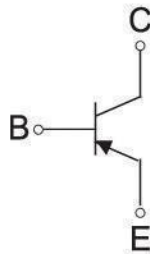


1. COLLECTOR

2. BASE

3. EMITTER

Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
BC327	TO-92	Bulk	1000pcs/Bag
BC327-TA	TO-92	Tape	2000pcs/Box
BC328	TO-92	Bulk	1000pcs/Bag
BC328-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	BC327	-50
		BC328	-30
V _{CEO}	Collector-Emitter Voltage	BC327	-45
		BC328	-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	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS

$T_a=25^\circ\text{C}$ unless otherwise specified

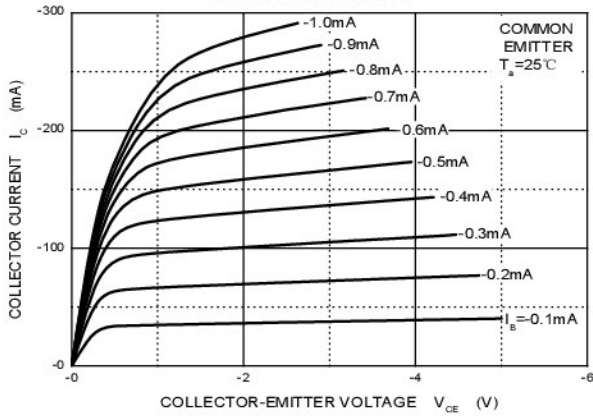
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage BC327 BC328	V_{CBO}	$I_C = -100\mu\text{A}, I_E = 0$	-50 -30			V
Collector-emitter breakdown voltage BC327 BC328	V_{CEO}	$I_C = -10\text{mA}, I_B = 0$	-45 -25			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -10\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current BC327 BC328	I_{CBO}	$V_{CB} = -45\text{V}, I_E = 0$ $V_{CB} = -25\text{V}, I_E = 0$			-0.1 -0.1	μA
Collector cut-off current BC327 BC328	I_{CEO}	$V_{CE} = -40\text{V}, I_B = 0$ $V_{CE} = -20\text{V}, I_B = 0$			-0.2 -0.2	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
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}

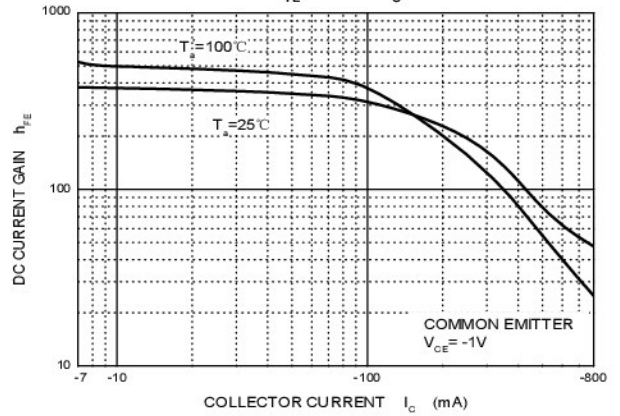
Rank	16	25	40
Range	100-250	160-400	250-630

Typical Characteristics

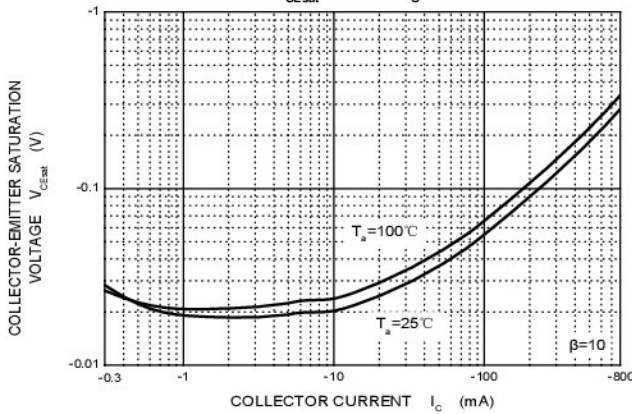
Static Characteristic



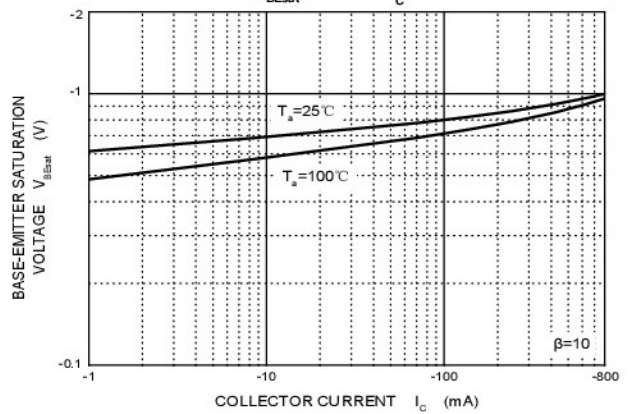
h_{FE} — I_C



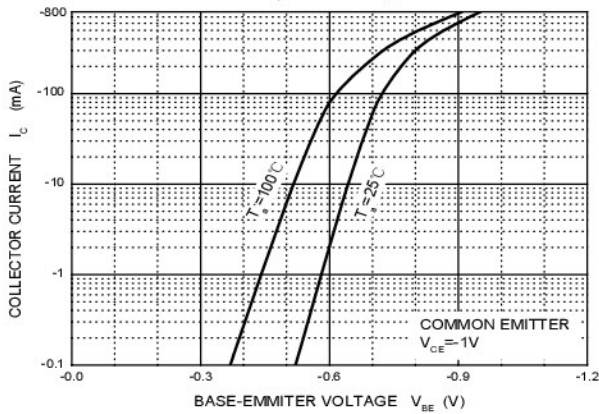
V_{CEsat} — I_C



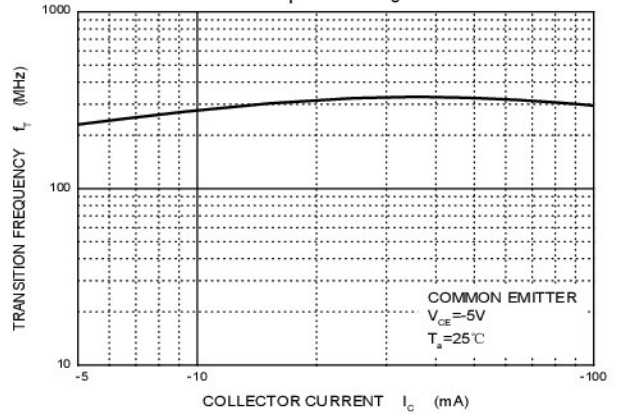
V_{BEsat} — I_C



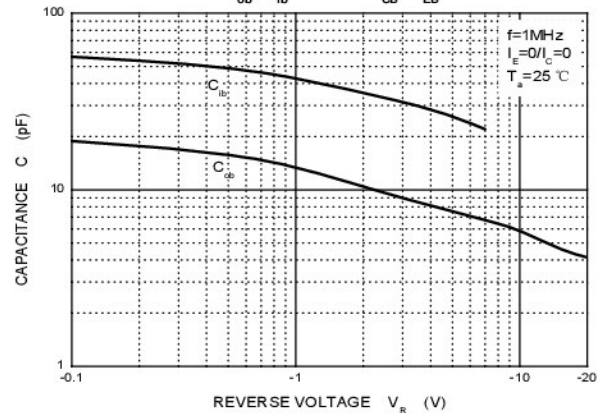
I_C — V_{BE}



f_T — I_C



C_{ob}/C_{ib} — V_{CE}/V_{EB}



P_C — T_a

