

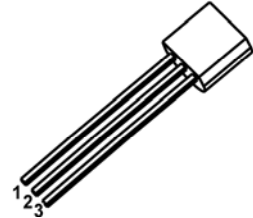
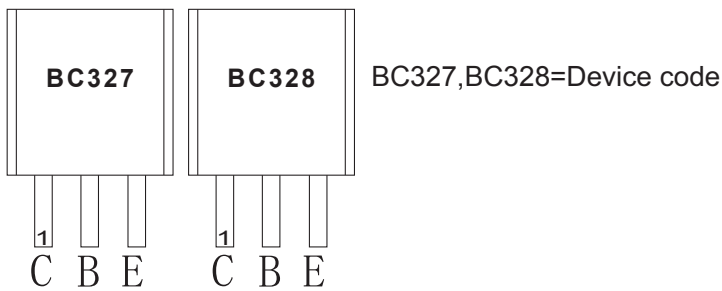
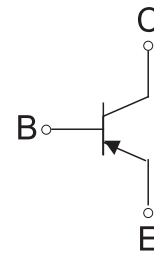
BC327/BC328 TRANSISTOR (PNP)

FEATURES

- Power dissipation

TO-92

- 1. COLLECTOR
- 2. BASE
- 3. EMITTER


MARKING

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)

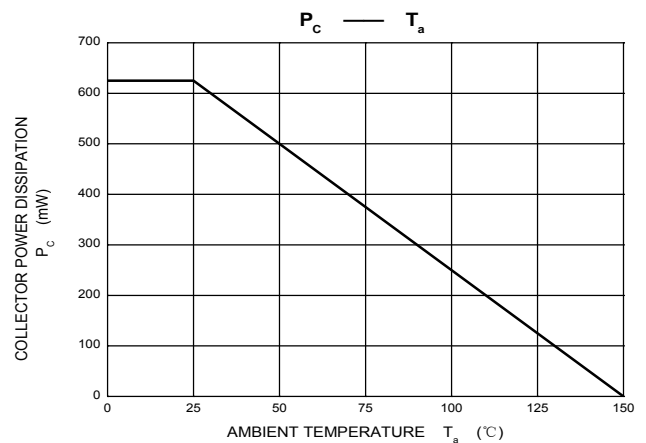
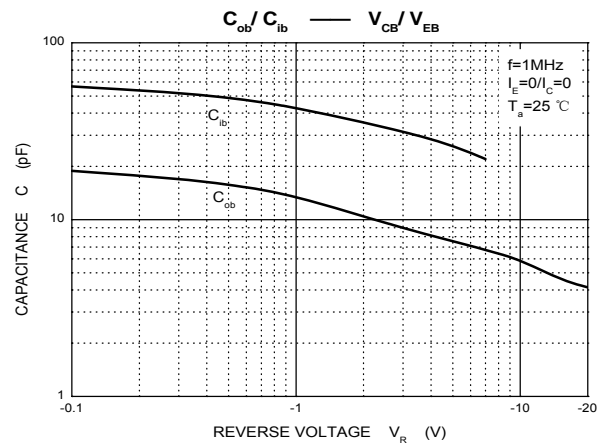
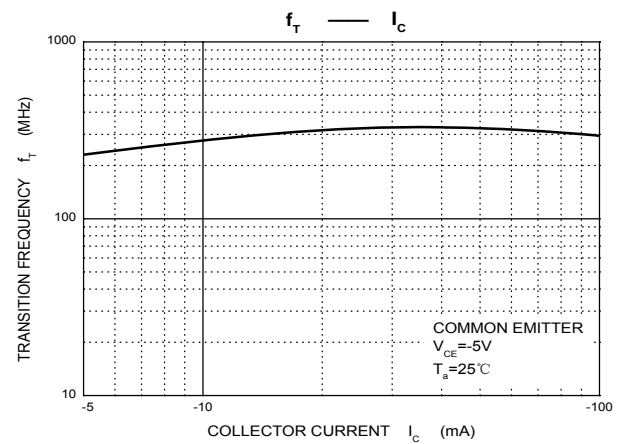
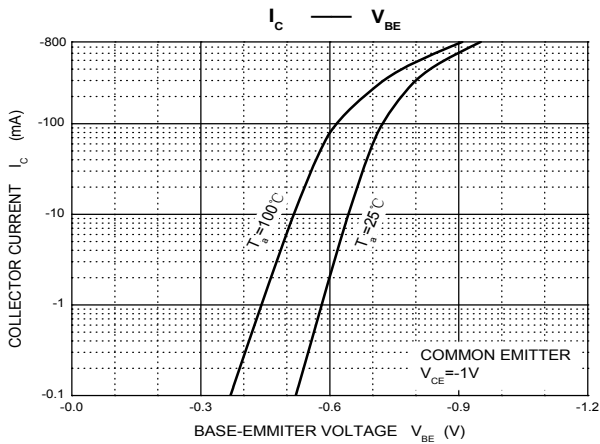
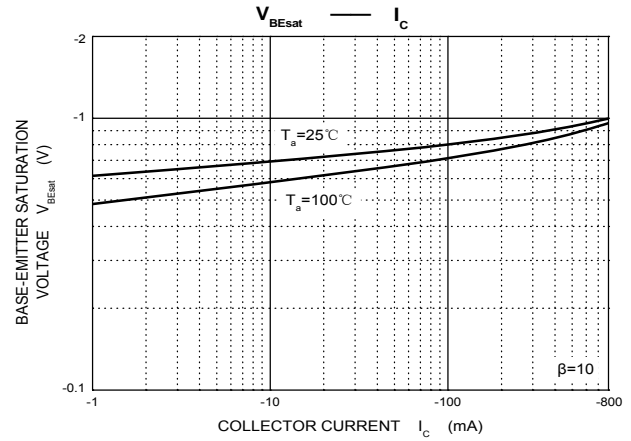
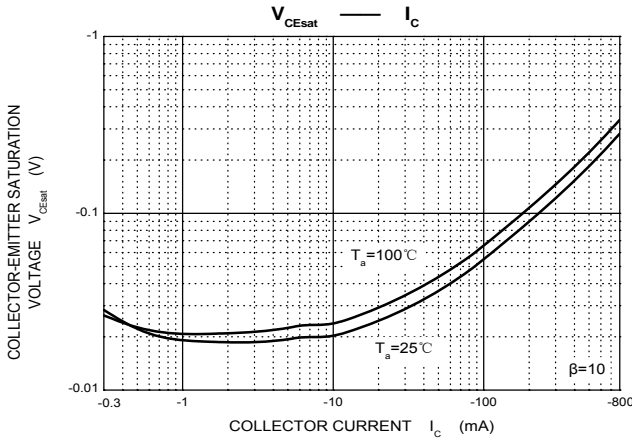
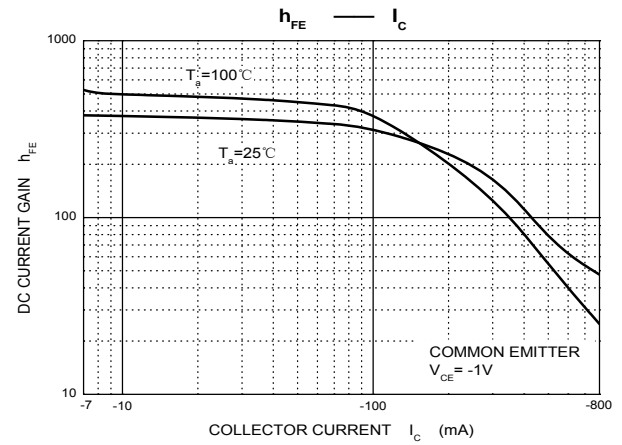
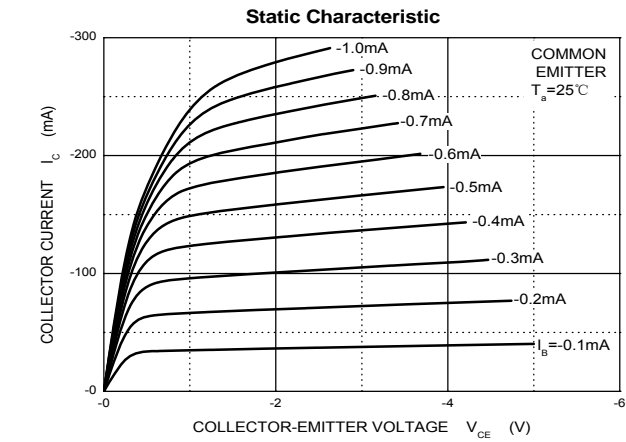
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	BC327	-50
		BC328	-30
V_{CEO}	Collector-Emitter Voltage	BC327	-45
		BC328	-25
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-800	mA
P_C	Collector Power Dissipation	625	mW
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

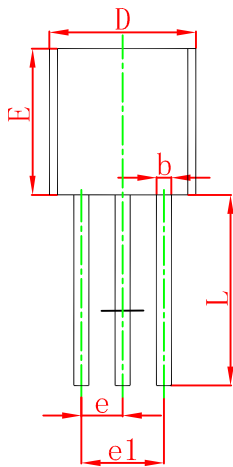
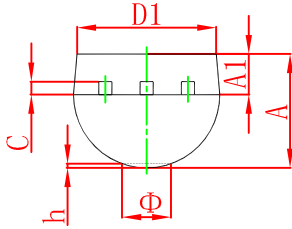
ELECTRICAL CHARACTERISTICS
 $T_a = 25^\circ\text{C}$ unless otherwise specified

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

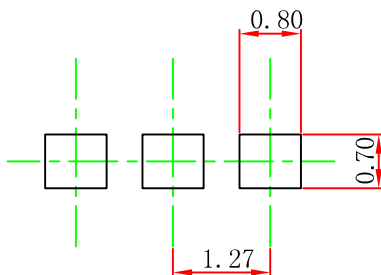
CLASSIFICATION OF h_{FE}

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

Typical Characteristics


TO-92 Package Outline Dimensions


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92 Suggested Pad Layout

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.