BC546/547/548/549/550

NPN Plastic-Encapsulate Transistors

1.Features

- Switching and Applications
- High Voltage: BC546, V_{CEO}=65V
- Low Noise: BC549, BC550
- Complement to BC556/557/558/559/BC560

Case:TO-92

1.C
2.B
3.E

2.Mechanical Data

- Case:Molded Plastic,TO-92
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking: marked on body.
- Mounting Position : Any.

3.Maximum Ratings and Electrical Characteristics

Rating at 25℃ Cambient temperature unless otherwise specified

Parameters		Symbol	Value	Unit
Collector-Base Voltage	BC546	BV_{CBO}	80	V
	BC547/550		50	
	BC548/549		30	
Collector-Emitter Voltage	BC546	BV_{CEO}	65	V
	BC547/550		45	
	BC548/549		30	
Emitter-Base Voltage	BC546	BV_{EBO}	6	V
	BC548/549/550		5	
Collector Current		I_C	100	mA
Collector Power Dissipation		P_C	500	mW
Junction and Storage Temperature Range		Tj、T_{stg}	-55 to +150	°C

4.Electrical Characteristics (TA=25℃ unless otherwise noted)

Parameters	Symbol	Cindition	Min	TYP	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB}= 30V,I_E= 0	-	-	15	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V,I_C= 0	-	-	15	μA
DC current gain	h_{FE}	V_{CE}= 5V,I_C= 2mA	110	-	800	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 10mA,I_B= 0.5mA	-	-	0.25	V
		I_C= 100mA,I_B= 5mA			0.6	
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 10mA,I_B= 0.5mA	-	-	1	V
		I_C= 100mA,I_B= 5mA				
Output Capacitance	f_T	V_{CE} = 5V,I_B = -10mA	-	200	-	MHz
Emitter-base breakdown voltage	Cob	V_{CB}=10V,I_E=0, f=1MHz	-	-	6	pF

5.hFE Classification and Ordering Information

Classification	A	B	C
hFE	110-220	200-450	420-800
Marking	BC546A/547A/548A/549A/550A	BC546B/547B/548B/549B/550B	BC546C/547C/548C/549C/550C

6.Rating And Characteristic Curves

Fig.1 Static Characteristic

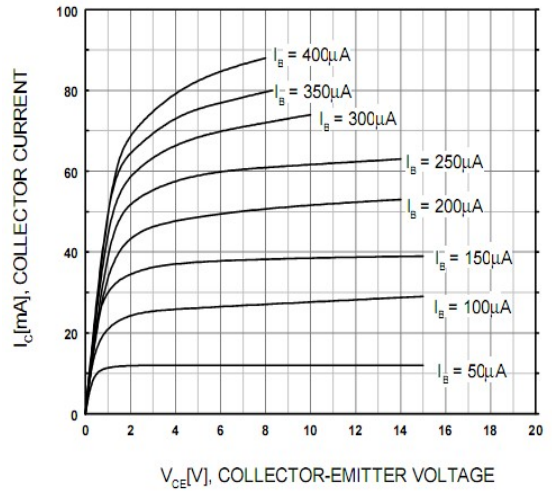


Fig.2 DC current Gain

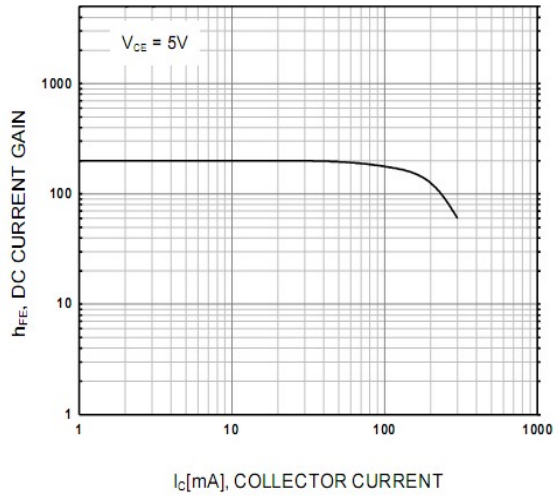


Fig.3 Transfer Characteristic

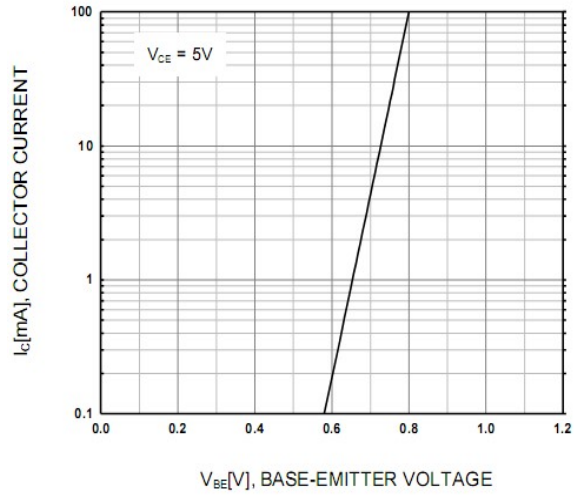


Fig.4 Base-Emitter/Collector-Emitter Saturation Voltage

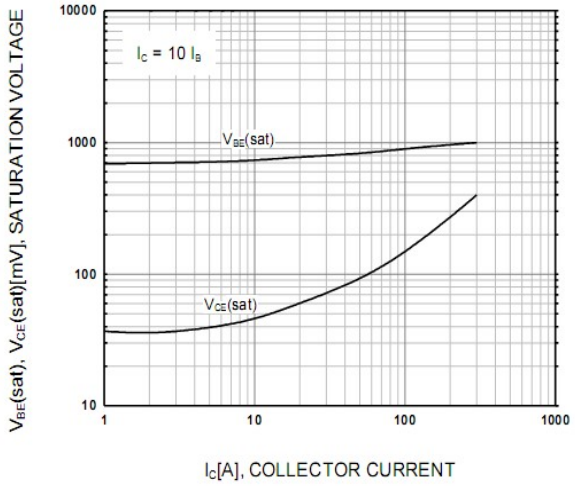


Fig.5 Output Capacitance

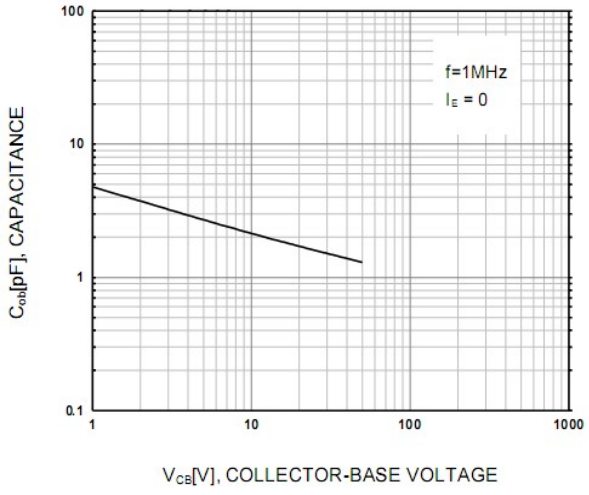
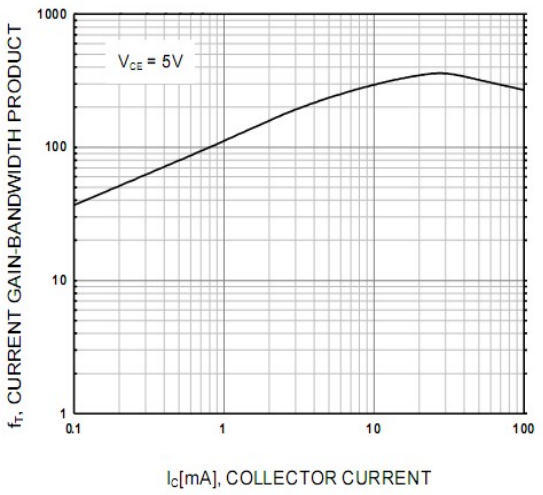
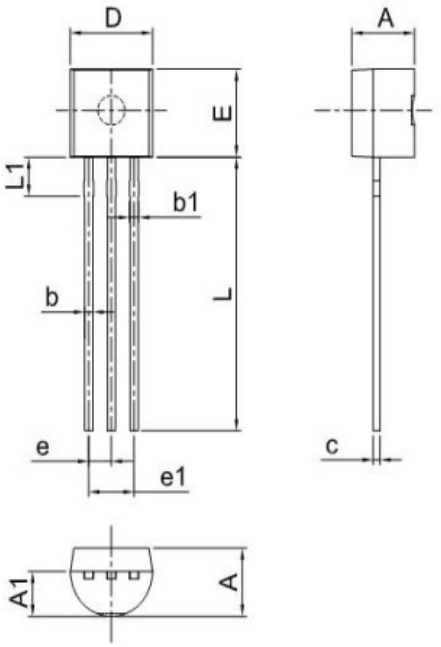


Fig.6 Current Gain Bandwidth Product

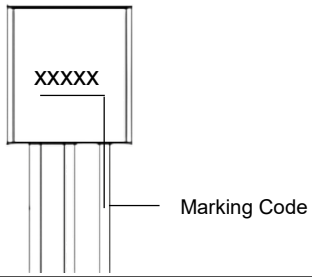


7.Dimensions



Dimensions	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.130	0.146	3.30	3.70
A1	0.083	0.106	2.10	2.70
b	0.016	0.020	0.40	0.50
b1	0.020	0.028	0.50	0.70
c	0.014	0.018	0.35	0.45
D	0.175	0.185	4.45	4.70
E	0.173	0.183	4.40	4.65
e	0.046	0.054	1.17	1.37
e1	0.092	0.104	2.34	2.64
L	0.531	0.571	13.50	14.50
L1	0.071	0.087	1.80	2.20

8. Part Marking System



9. Package Information

Package	Box	Carton
TO92	2000pcs	20,000pcs

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