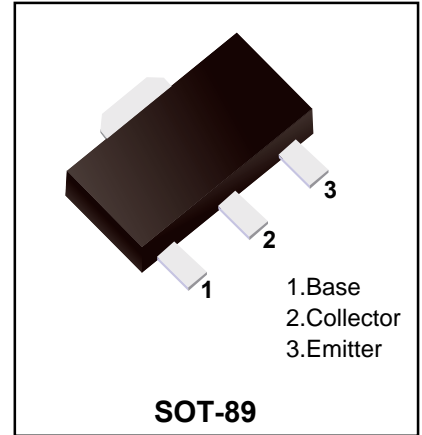


PNP Transistors

Features

- NPN Complements to BCX54,BCX55,BCX56
- Low Voltage
- High Current



Absolute Maximum Rating (Ta=25°C)

Parameter		Symbol	Rating	Unit
Collector-base voltage	BCX51	V _{CB0}	-45	V
	BCX52		-60	V
	BCX53		-100	V
Collector-emitter voltage	BCX51	V _{CEO}	-45	V
	BCX52		-60	V
	BCX53		-80	V
Emitter-base voltage		V _{EBO}	-5	V
Collector current		I _C	-1	A
Peak collector current		I _{CM}	-1.5	A
Peak base current		I _{BM}	-200	mA
Total power dissipation		P _{tot}	1.3	W
Storage temperature		T _{stg}	-65 to +150	°C
Junction temperature		T _j	150	°C
Operating ambient temperature		T _{amb}	-65 to +150	°C
Thermal resistance from junction to ambient		R _{th(j-a)}	94	K/W
Thermal resistance from junction to solder point		R _{th(j-s)}	14	K/W

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	ICBO	V _{CB} = -30 V, I _E = 0			-100	nA
		V _{CB} = -30 V, I _E = 0; T _j = 125°C			-10	uA
Emitter cutoff current	IEBO	V _{EB} = -5 V, I _C = 0			-100	nA
DC current gain	h _{FE}	I _C = -5 mA; V _{CE} = -2 V	63			
		I _C = -150 mA; V _{CE} = -2 V	63		250	
		I _C = -500 mA; V _{CE} = -2 V	40			
DC current gain BCX51-10,BCX52-10,BCX53-10 BCX51-16,BCX52-16,BCX53-16	h _{FE}	I _C = -150 mA; V _{CE} = -2 V	63		160	
		I _C = -150 mA; V _{CE} = -2 V	100		250	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -500 mA; I _B = -50 mA			-500	mV
Base to emitter voltage	V _{BE}	I _C = -500 mA; V _{CE} = -2 V			-1	V
Transition frequency	f _T	I _C = -10 mA; V _{CE} = -5 V; f = 100 MHz		50		MHz

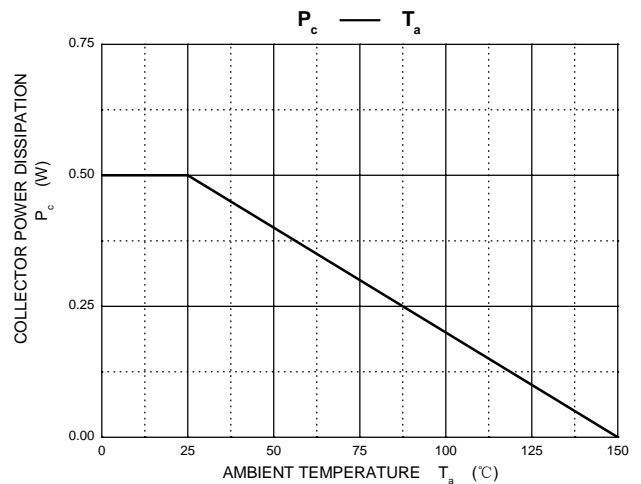
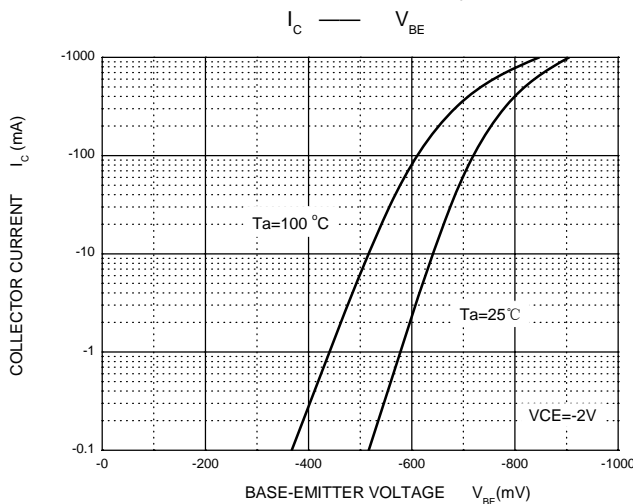
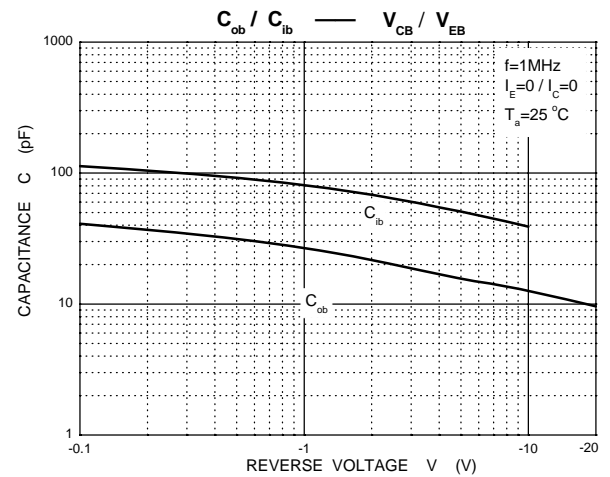
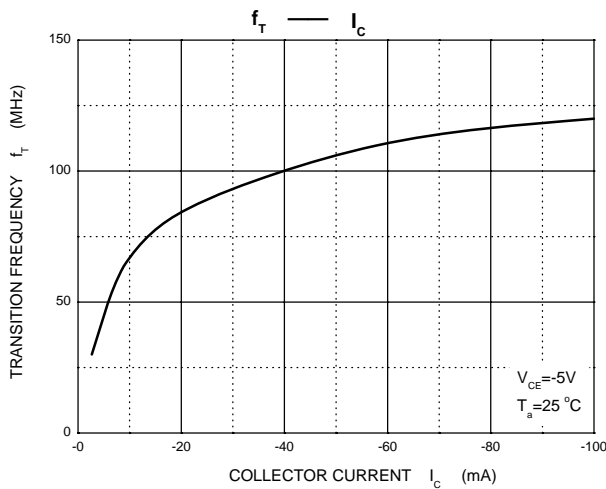
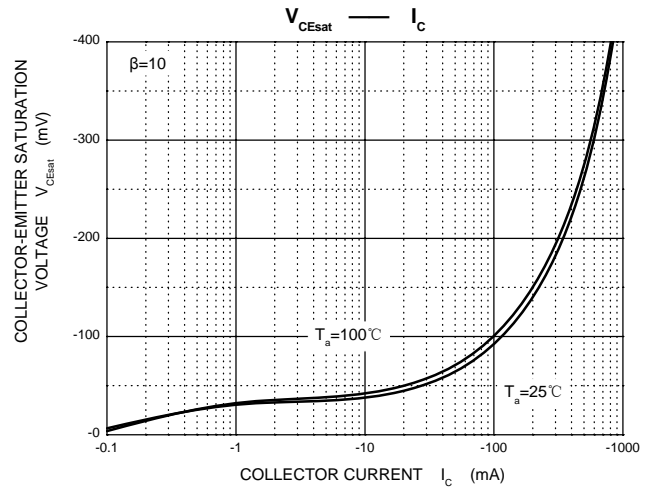
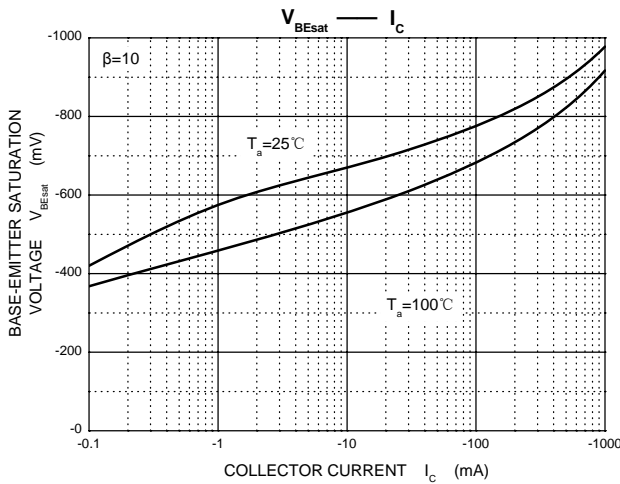
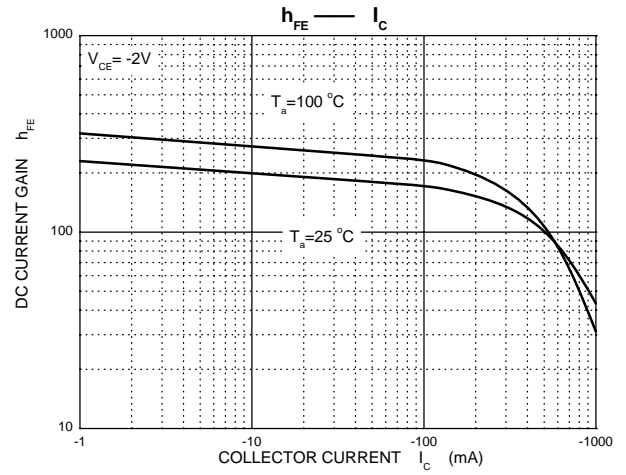
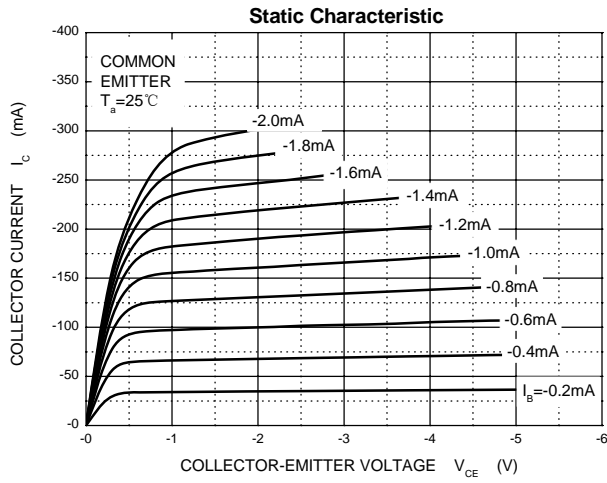
h_{FE} Classification

TYPE	BCX51	BCX51-10	BCX51-16
Marking	AA	AC	AD

TYPE	BCX52	BCX52-10	BCX52-16
Marking	AE	AG	AM

TYPE	BCX53	BCX53-10	BCX53-16
Marking	AH	AK	ALK510

Typical Characteristics



Ordering information

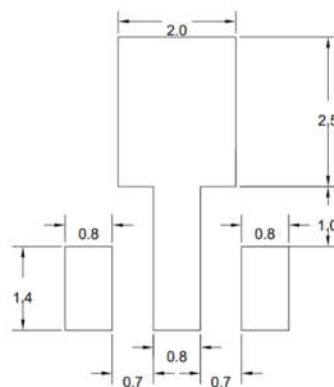
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.