

Plastic-Encapsulate Transistors

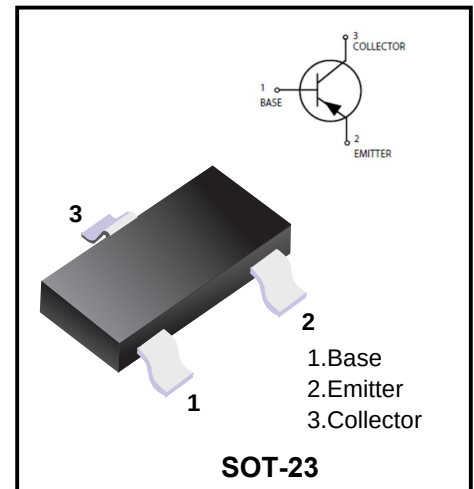
TRANSISTOR(PNP)

FEATURES

- ◆Complementary to SS8050
- ◆Power Dissipation of 300mW
- ◆High Stability and High Reliability

MECHANICAL DATA

- ◆Case: SOT-23
- ◆Epoxy UL: 94V-0
- ◆Mounting Position: Any
- ◆High temperature soldering guaranteed: 260°C/10s
- ◆We declare that the material of product compliant with RoHS requirements and Halogen free



Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter -Base Voltage	V_{EBO}	-6	V
Collector Current-Continuous	I_C	-1500	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55-+150	°C
Thermal resistance From junction to ambient	$R_{\theta JA}$	417	°C/W

Electrical Characteristics

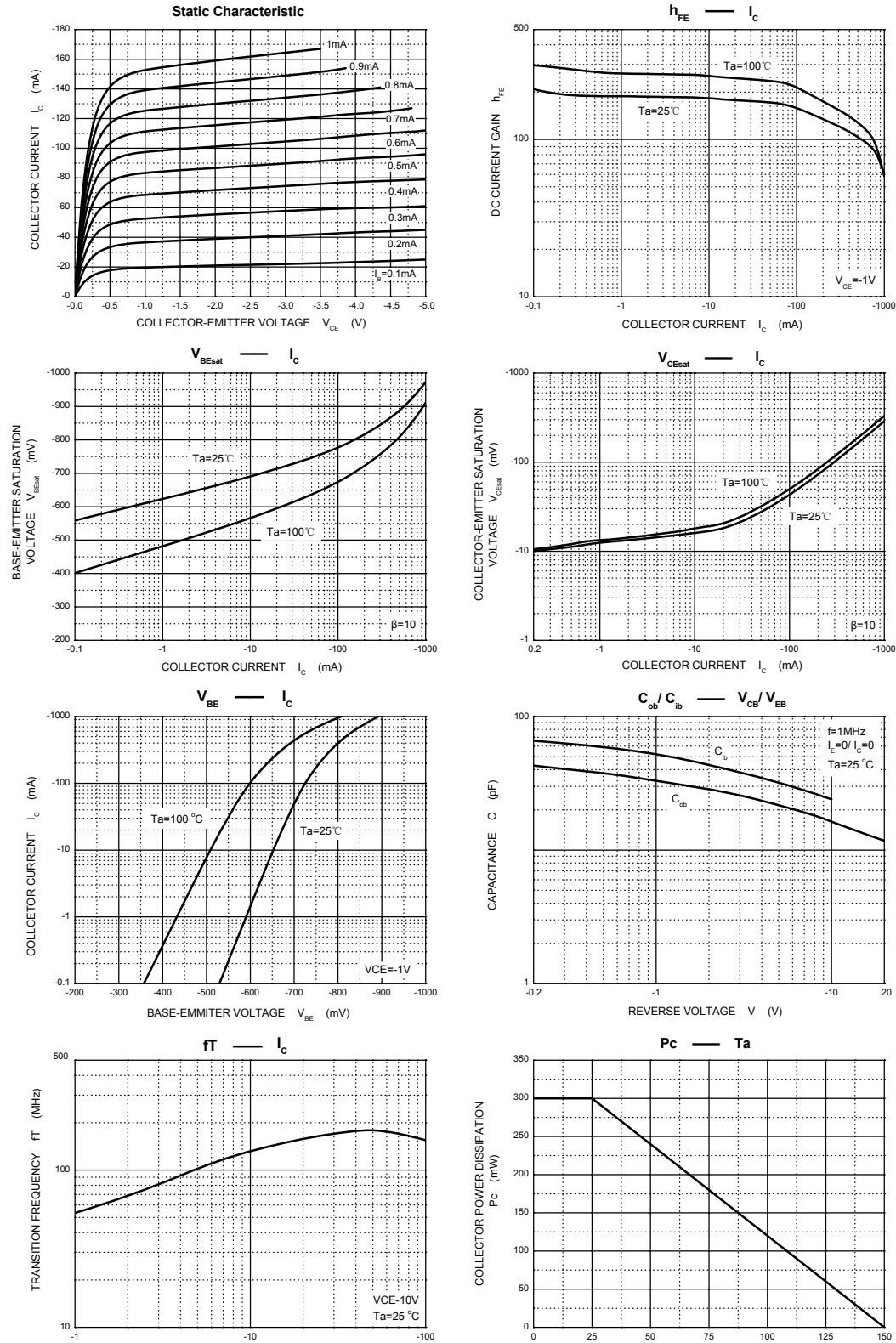
Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Test Condition	Symbols	Min	Max	Unit
Collector-base breakdown voltage	$I_C = -100\mu A, I_E = 0$	$V_{(BR)CBO}$	-50		V
Collector-emitter breakdown voltage	$I_C = -0.1mA, I_B = 0$	$V_{(BR)CEO}$	-50		V
Emitter-base breakdown voltage	$I_E = -100\mu A, I_C = 0$	$V_{(BR)EBO}$	-6		V
Collector cut-off current	$V_{CB} = -40V, I_E = 0$	I_{CBO}		-100	nA
Collector cut-off current	$V_{CE} = -20V, I_B = 0$	I_{CEO}		-100	nA
Emitter cut-off current	$V_{EB} = -5V, I_C = 0$	I_{EBO}		-100	nA
DC current gain	$V_{CE} = -1V, I_C = -100mA$	$h_{FE(1)}$	120	400	
	$V_{CE} = -1V, I_C = -800mA$	$h_{FE(2)}$	40		
Collector-emitter saturation voltage	$I_C = -800mA, I_B = -80mA$	$V_{CE(sat)}$		-0.50	V
Base -emitter saturation voltage	$I_C = -800mA, I_B = -80mA$	$V_{BE(sat)}$		-1.20	V
Base-emitter voltage	$V_{CE} = -1V, I_C = -10mA$	V_{BE}		-1.00	V
Transition frequency	$V_{CE} = -10V, I_C = -50mA, f = 30MHz$	f_T	100		MHz
Collector output capacitance	$V_{CB} = -10V, I_E = 0, f = 1MHz$	C_{ob}		20	pF

CLASSIFICATION OF $h_{FE(1)}$

Type	SS8550	SS8550-L	SS8550-H	SS8550-J
Range	200-350	120-200	200-350	300-400
Marking	Y2			

Typical Characteristics



Ordering information

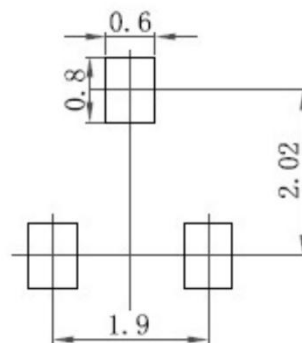
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
e	1.9		75	
e1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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.