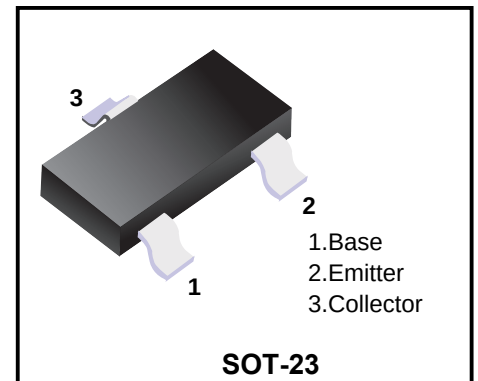


NPN Transistors

Features

- Excellent hFE linearity
- Collector Current :Ic=0.1A



Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	50	V
Collector-Emitter Voltage	V _{CE0}	45	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current -Continuous	I _c	0.1	A
Collector Power Dissipation	P _c	0.2	W
Junction Temperature	T _j	150	℃
Storage Temperature	T _{stg}	-55 to 150	℃

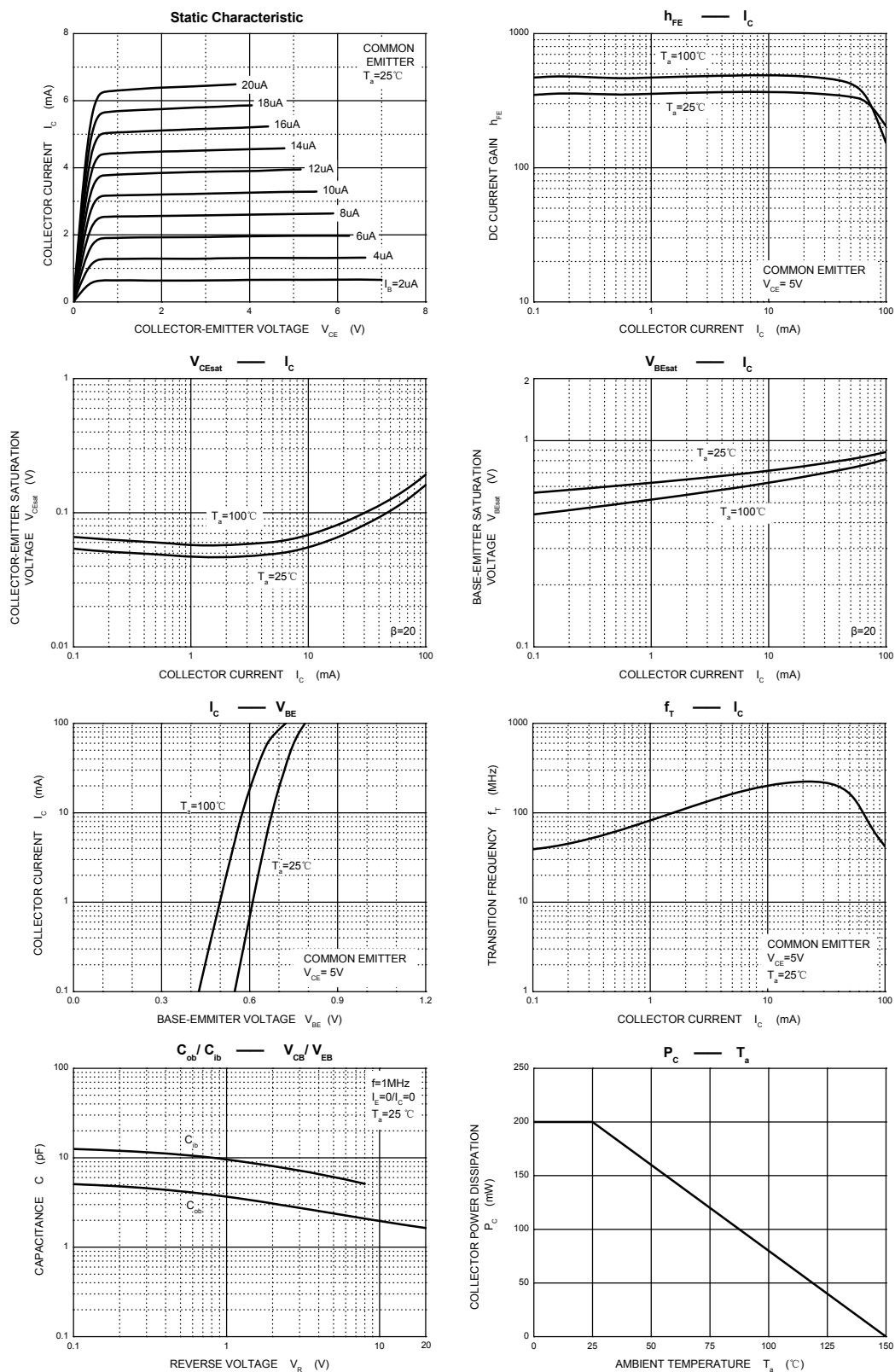
Electrical Characteristics (Ta=25℃ unless otherwise specified.)

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{CB0}	I _c =100uA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{CE0}	I _c =1mA, I _B =0	45			V
Emitter-base Breakdown voltage	V _{EB0}	I _E =100 μ A, I _c =0	5			V
Collector cutoff current	I _{CBO}	V _{CB} =50V, I _E =0			0.1	μ A
Emitter cutoff current	I _{EBO}	V _{EB} =5V, I _c =0			0.1	μ A
DC current gain	h _{FE}	V _{CE} =5V, I _c =1mA	200		1000	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =100mA, I _B =10mA			0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _c =100mA, I _B =10mA			1	V
Transition frequency	f _T	V _{CE} =5V, I _c =10mA,f=30MHZ	150			MHz

hFE Classification

Type	S9014	S9014-L	S9014-H
Range	300-400	200-450	450-1000
Marking	J6		

Typical Characteristics



Ordering information

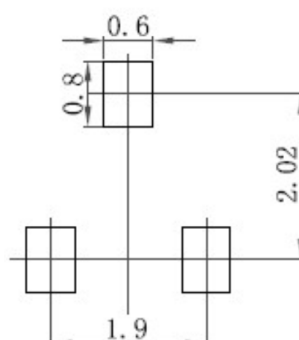
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

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

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