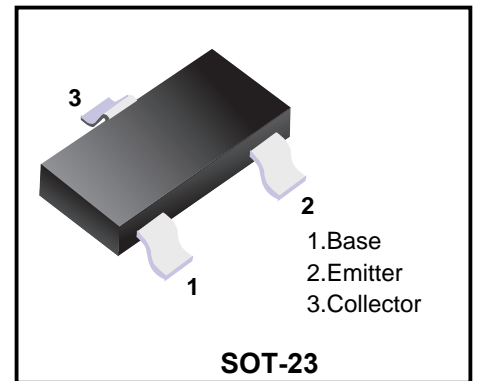


PNP Transistors

Features

- Collector-Base Voltage: $V_{CBO}=-60V$



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-60	V
Collector to emitter voltage	V_{CEO}	-50	V
Emitter to base voltage	V_{EBO}	-5.0	V
Collector Current (DC)	I_C	-150	mA
Power dissipation	P_C	200	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

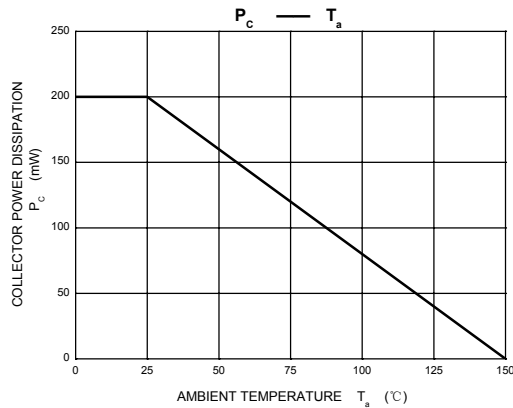
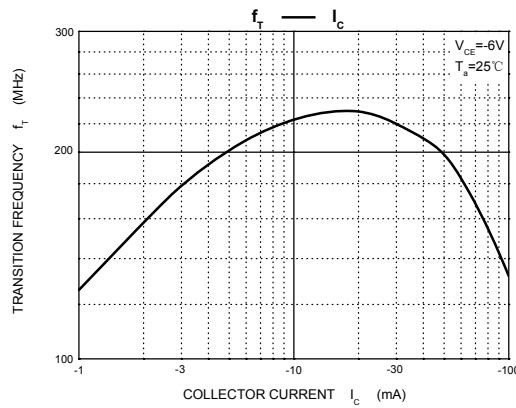
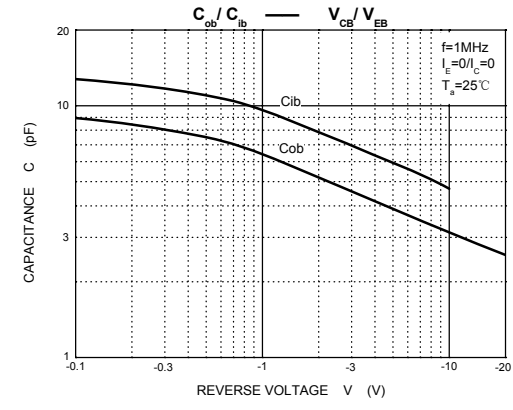
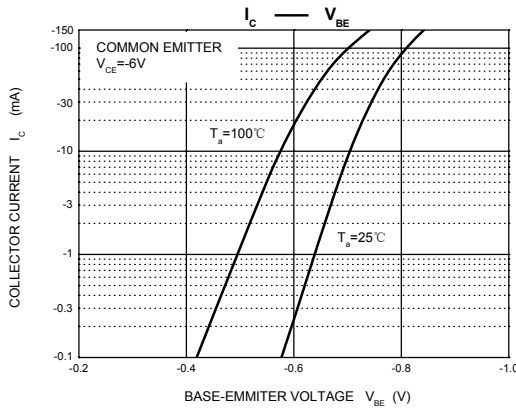
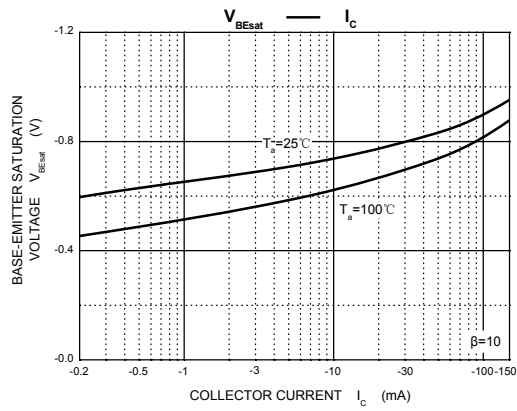
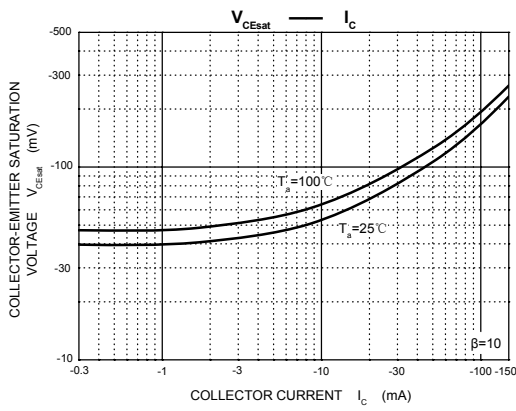
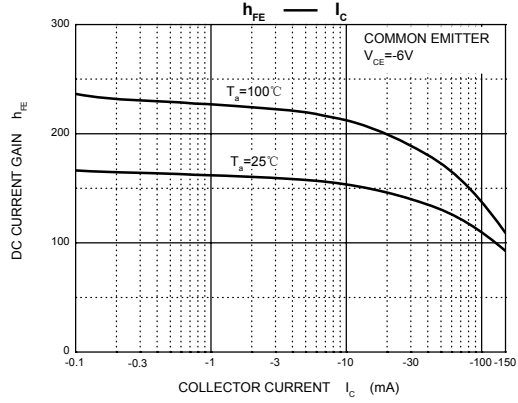
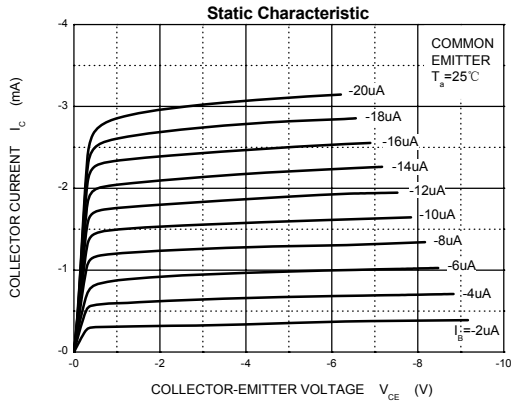
Electrical Characteristics (Ta=25°C unless otherwise specified.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -50\mu A, I_E = 0$	-60			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1mA, I_B = 0$	-50			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -50\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -60V, I_E = 0$			-0.1	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.1	uA
DC current gain	h_{FE}	$V_{CE} = -6V, I_C = -1mA$	120		475	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -10mA$		-0.18	-0.3	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE} = -6V, I_C = -1.0mA$	-0.58	-0.62	-0.68	V
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		4.5	7	pF
Noise figure	NF	$V_{CE} = -6V, I_C = -0.3mA, R_g = 10k\Omega, f = 100Hz$		6	20	dB
Transition frequency	f_T	$V_{CE} = -6V, I_C = -10mA$	50			MHz

Marking

Marking	CS		
Range	200-400	120-220	220-475

Typical Characteristics



Ordering information

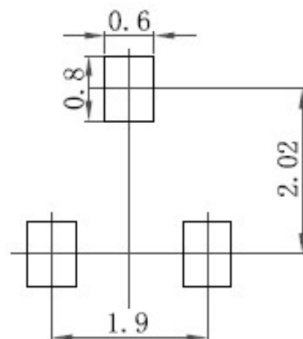
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

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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