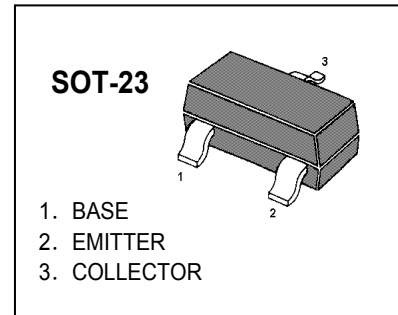


SOT-23 Plastic-Encapsulate Transistors

FEATURES

High voltage transistor



MARKING:2D

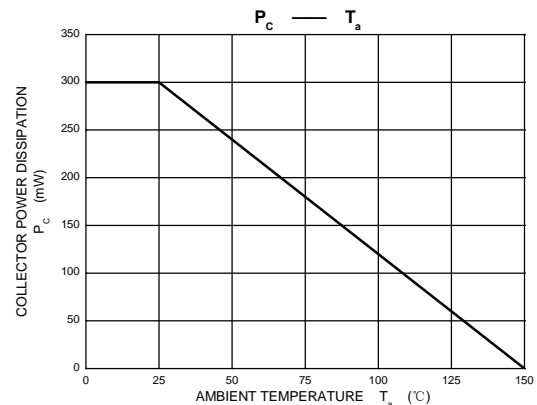
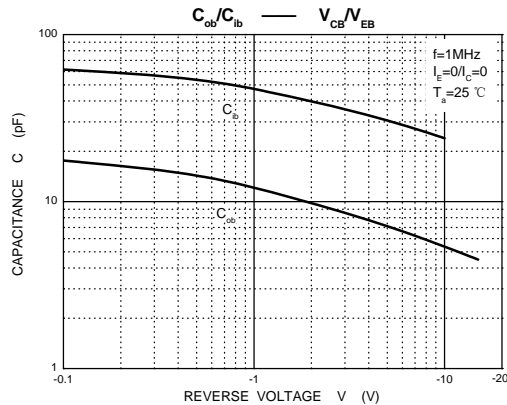
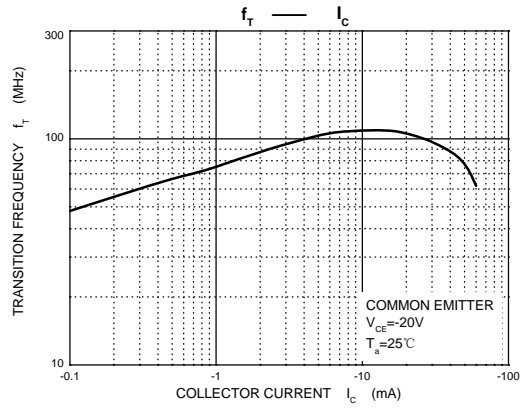
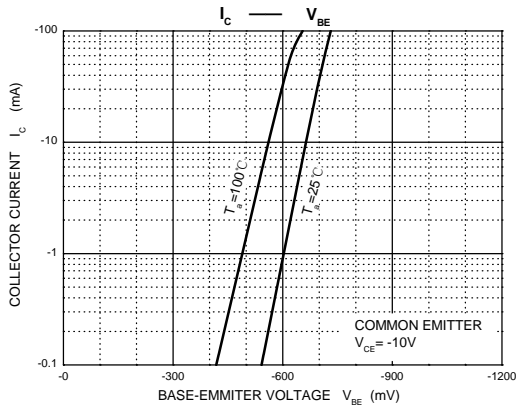
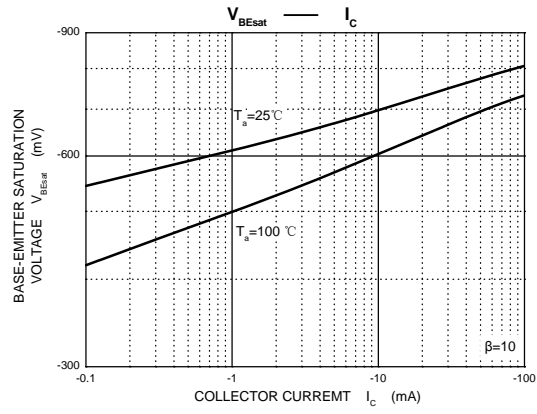
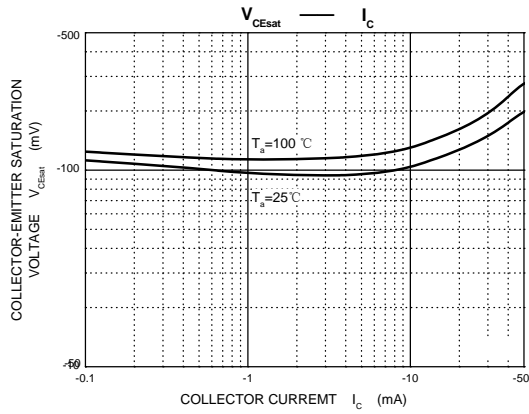
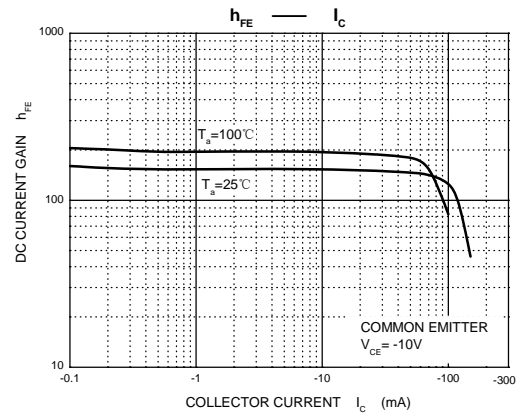
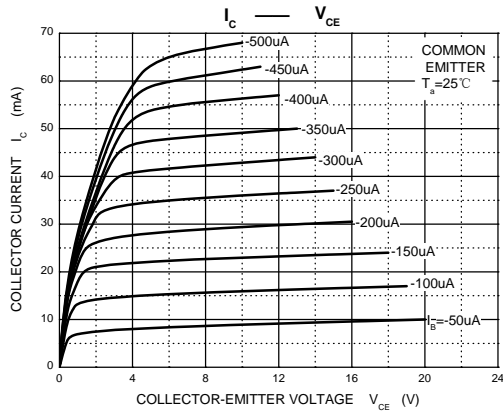
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-300	V
V _{CEO}	Collector-Emitter Voltage	-300	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-200	mA
I _{CM}	Collector Current -Pulsed	-500	mA
P _C	Collector Power Dissipation	300	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C
R _{θJA}		417	°C/mW

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -100μA, I _E =0	-300		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-300		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100μA, I _C =0	-5		V
Collector cut-off current	I _{CBO}	V _{CB} =-200V, I _E =0		-0.25	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5V, I _C =0		-0.1	μA
DC current gain	h _{FE(1)}	V _{CE} = -10V, I _C = -1mA	60		
	h _{FE(2)}	V _{CE} = -10V, I _C =-10mA	100	200	
	h _{FE(3)}	V _{CE} = -10V, I _C =-30mA	60		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-20mA, I _B = -2mA		-0.2	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -20mA, I _B = -2mA		-0.9	V
Transition frequency	f _T	V _{CE} =-20V, I _C = -10mA f=30MHz	50		MHz

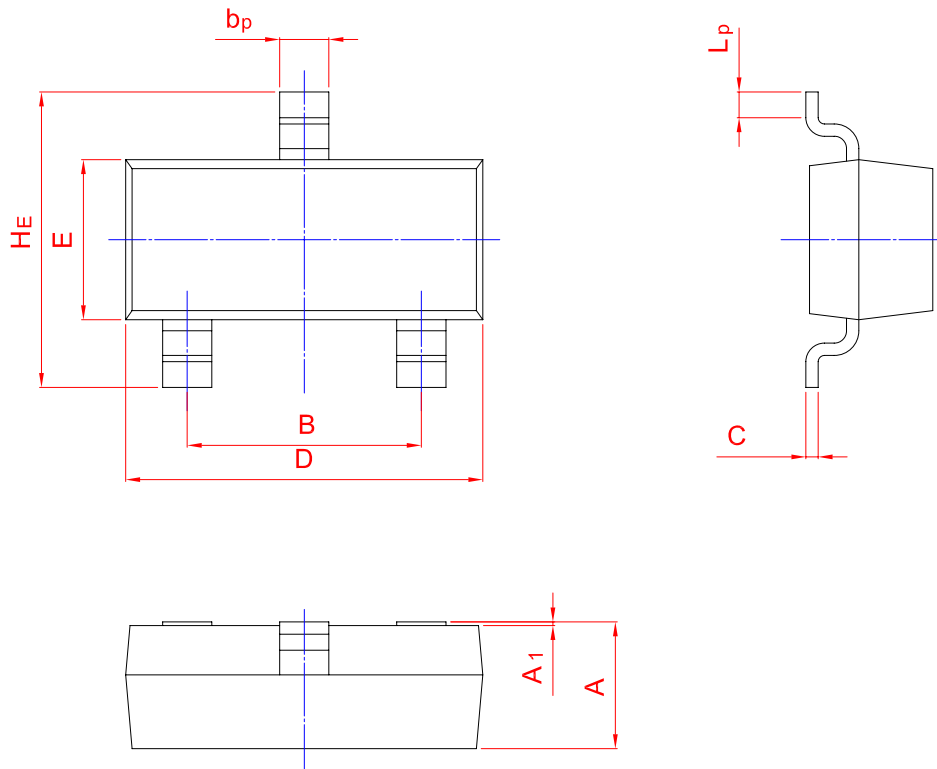
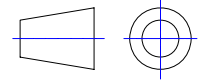
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b_p	C	D	E	H_E	A_1	L_p
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20