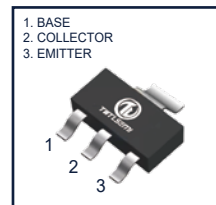
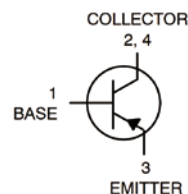


Features

- Low Voltage and Low Current
- Complementary to PZT3904
- General Purpose Amplifier and Switch Application



SOT-223



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.2	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction And Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-0.01\text{mA}, I_E=0$	-40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-1\text{mA}, I_B=0$	-40			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-0.01\text{mA}, I_C=0$	-5			V
I_{CBO}	Collector cut-off current	$V_{CB}=-30\text{V}, I_E=0$			-50	nA
I_{CEX}	Collector cut-off current	$V_{CE}=-30\text{V}, V_{BE(off)}=-3\text{V}$			-50	nA
$h_{FE(1)}$	DC current gain	$V_{CE}=-1\text{V}, I_C=-0.1\text{mA}$	60			
$h_{FE(2)}$		$V_{CE}=-1\text{V}, I_C=-1\text{mA}$	80			
$h_{FE(3)}$		$V_{CE}=-1\text{V}, I_C=-10\text{mA}$	100		300	
$h_{FE(4)}$		$V_{CE}=-1\text{V}, I_C=-50\text{mA}$	60			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=-10\text{mA}, I_B=-1\text{mA}$			-0.25	V
		$I_C=-50\text{mA}, I_B=-5\text{mA}$			-0.4	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C=-10\text{mA}, I_B=-1\text{mA}$	-0.65		-0.85	V
		$I_C=-50\text{mA}, I_B=-5\text{mA}$			-0.95	V
f_T	Transition frequency	$V_{CE}=-20\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$	250			MHz
C_{ob}	Collector output capacitance	$V_{CB}=-5\text{V}, I_E=0, f=1\text{MHz}$			4.5	pF
C_{ib}	Emitter input capacitance	$V_{BE}=-0.5\text{V}, I_C=0, f=1\text{MHz}$			10	pF
t_d	Delay time	$V_{CC}=-3\text{V}, V_{BE(off)}=-0.5\text{V}, I_C=-10\text{mA}, I_{B1}=-I_{B2}=-1\text{mA}$			35	ns
t_r	Rise time				35	
t_s	Storage time	$V_{CC}=-3\text{V}, I_C=-10\text{mA}, I_{B1}=-I_{B2}=-1\text{mA}$			225	ns
t_f	Fall time				75	

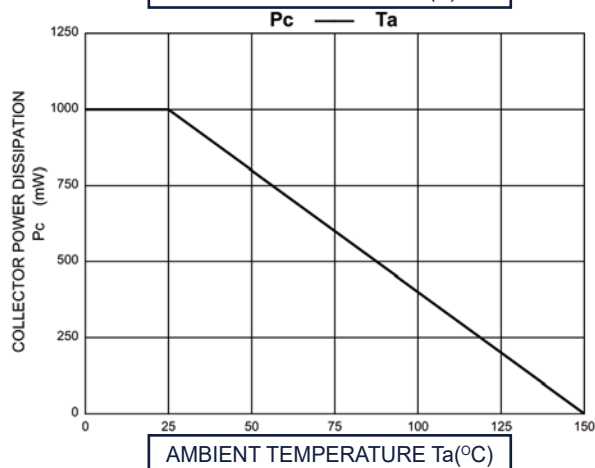
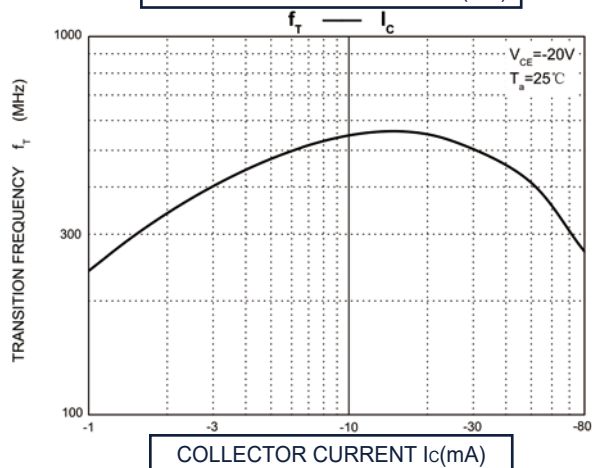
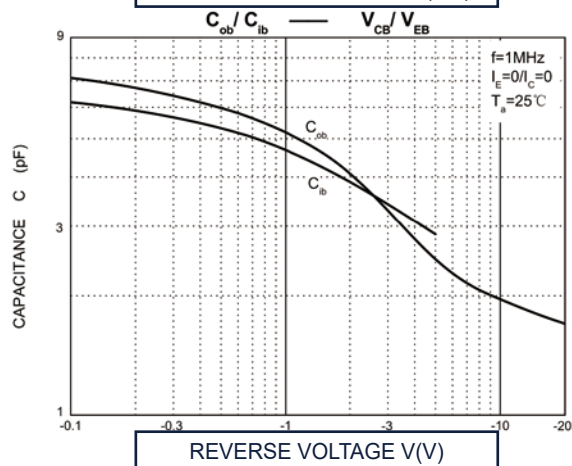
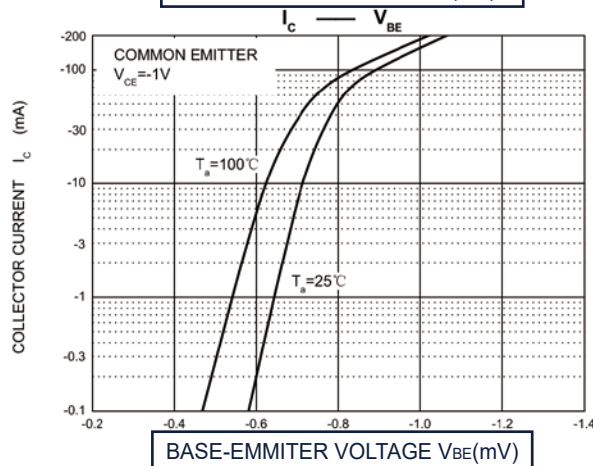
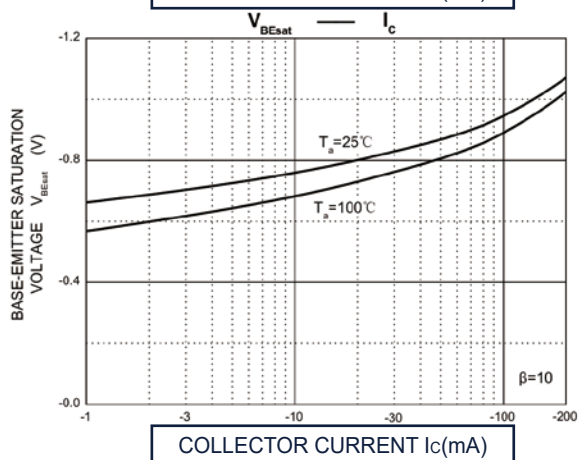
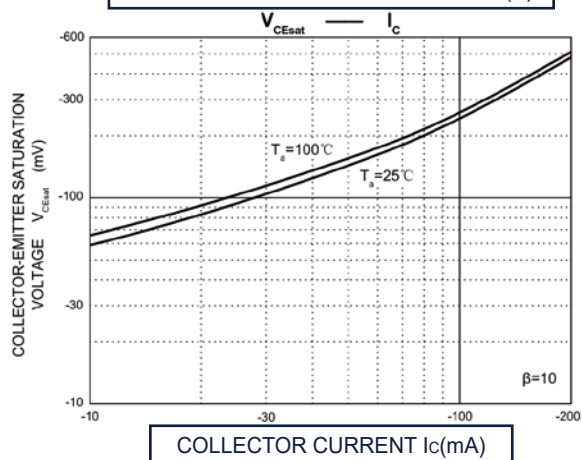
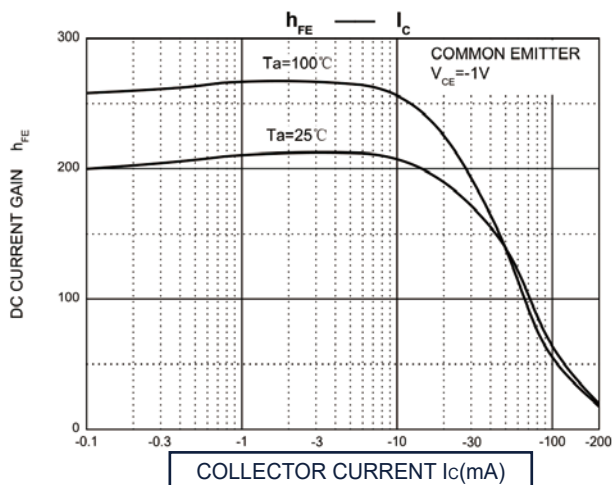
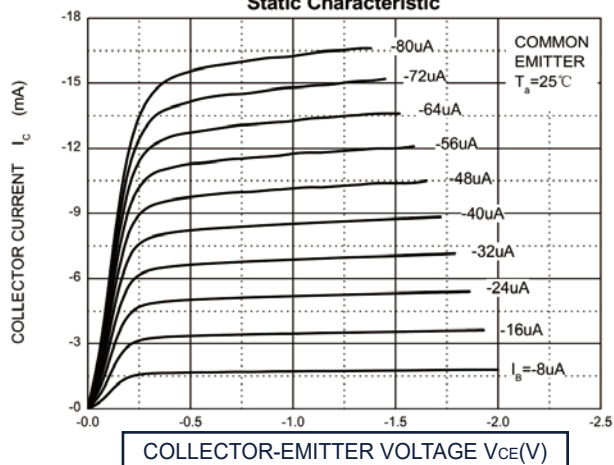
Ordering information

Product ID	Pack	Naming rule	Marking	$h_{FE(1)}$	Qty(PCS)
PZT3906	SOT-223	PZT3906 ↓ 产品名称 product name	ZT3906	100-300	1000



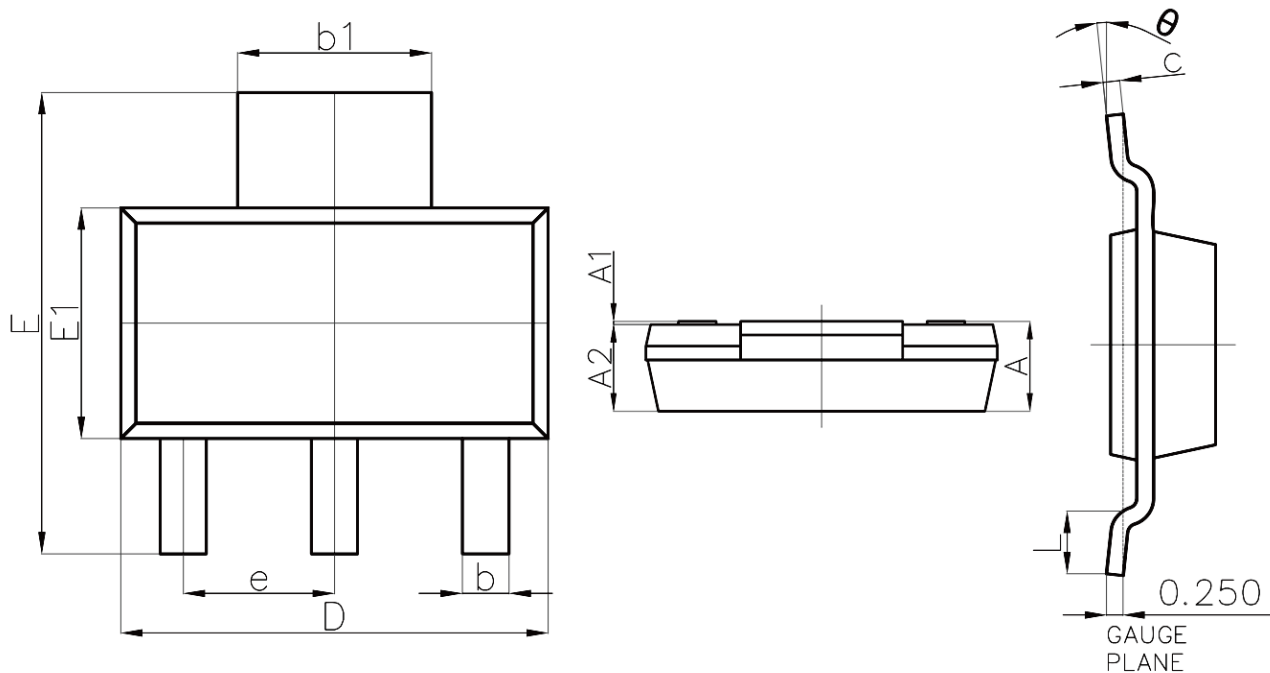
Typical Characteristics

Static Characteristic





SOT-223 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	—	1.800	—	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	—	0.030	—
θ	0°	10°	0°	10°