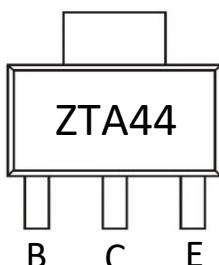


## Features

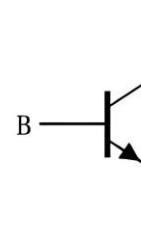
- Low current : 300mA(max)
- High voltage:  $V_{CEO}=400V$



Marking and pin assignment



SOT-223 top view



Schematic diagram



Halogen-Free

## Maximum Ratings(Ta=25°C unless otherwise noted)

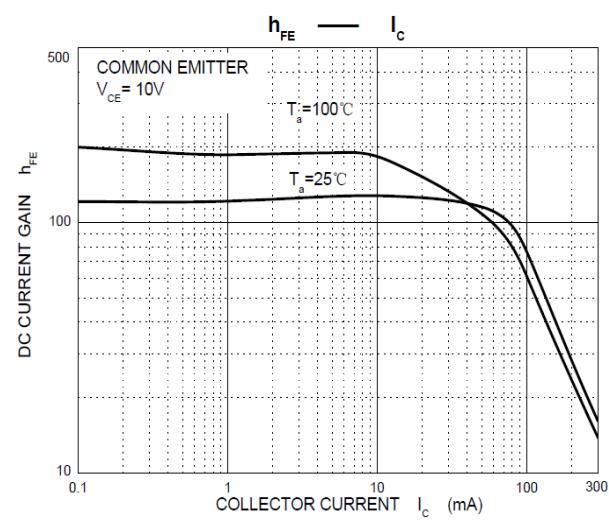
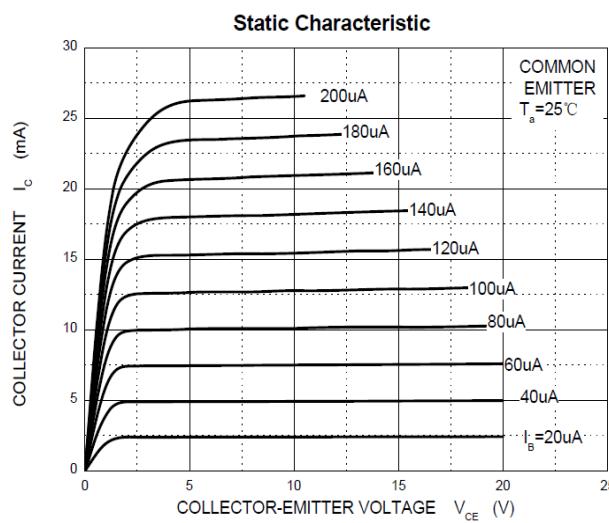
Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	400	V
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current -Continuous	200	mA
$I_{CM}$	Peak Pulse Collector Current	300	mA
$P_C$	Collector Power Dissipation	1	W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	°C

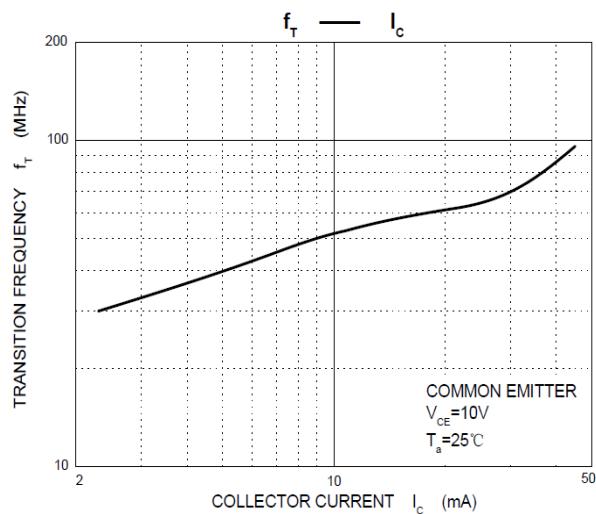
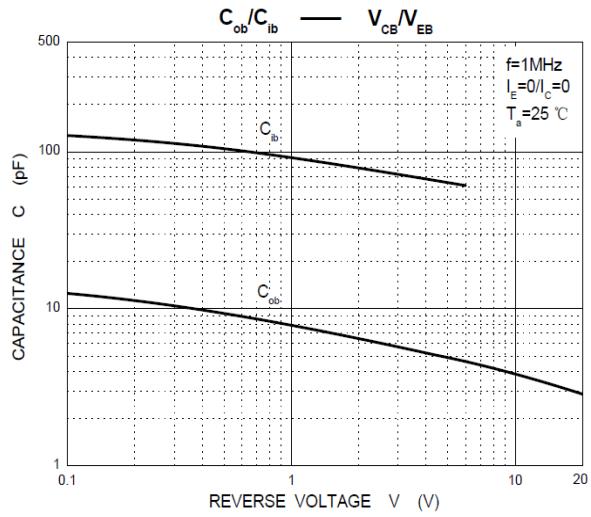
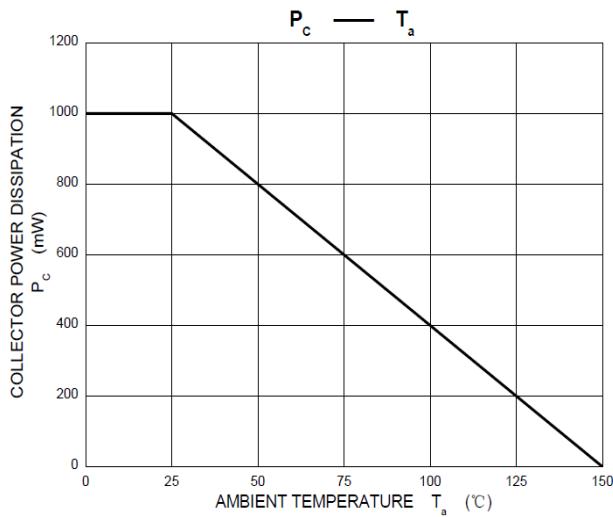
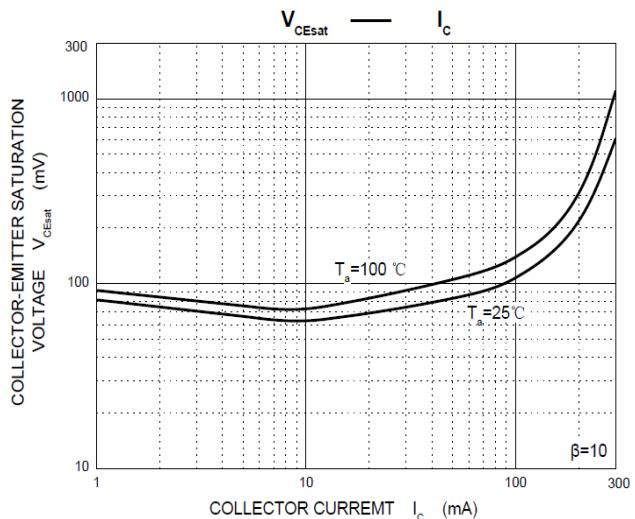
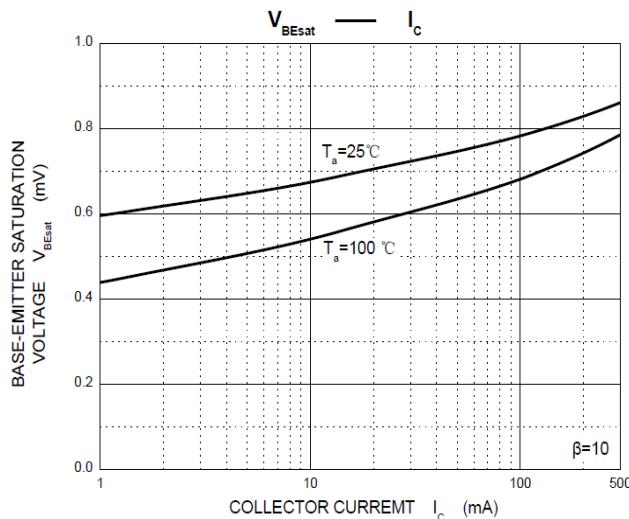
## Ordering Information (Example)

Type	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PZTA44	ZTA44	2,500	5,000	35,000	13"reel

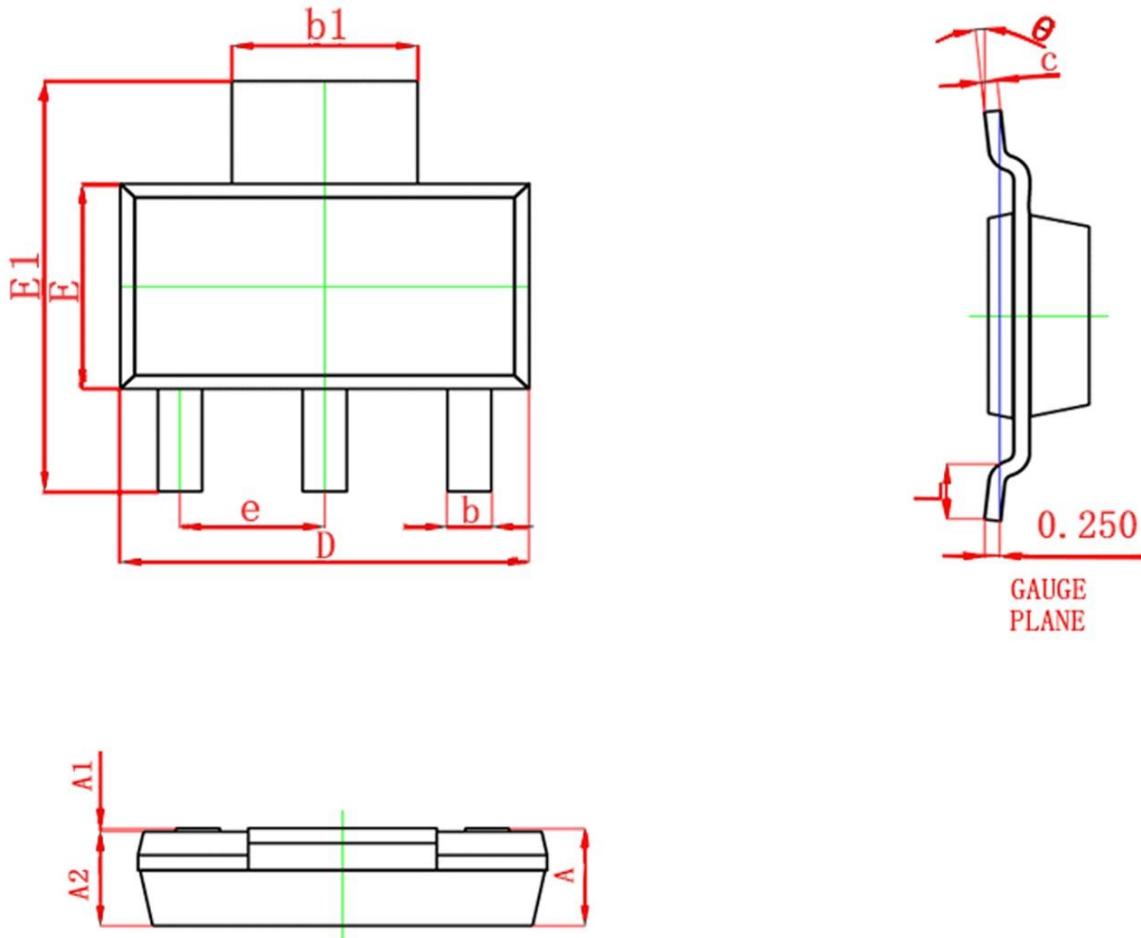
**Electrical Characteristics (T<sub>J</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Condition	Min	Typ	Max	Unit
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =100μA, I <sub>E</sub> =0	400	--	--	V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =1mA, I <sub>B</sub> =0	400	--	--	V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =100μA, I <sub>C</sub> =0	6	--	--	V
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =400V, I <sub>E</sub> =0	--	--	0.1	μA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =4V, I <sub>C</sub> =0	--	--	0.1	μA
<i>h</i> <sub>FE1</sub>	DC current gain	V <sub>CE</sub> =10V, I <sub>C</sub> =1mA	40	--	--	--
<i>h</i> <sub>FE2</sub>		V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	50	--	200	
<i>h</i> <sub>FE3</sub>		V <sub>CE</sub> =10V, I <sub>C</sub> =50mA	45			
<i>h</i> <sub>FE4</sub>		V <sub>CE</sub> =10V, I <sub>C</sub> =100mA	40	--	--	
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =1mA, I <sub>B</sub> =0.1mA	--	--	0.4	V
V <sub>CE(sat)</sub>		I <sub>C</sub> =10mA, I <sub>B</sub> =1mA	--	--	0.5	V
V <sub>CE(sat)</sub>		I <sub>C</sub> =50mA, I <sub>B</sub> =5mA	--	--	0.75	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA	--	--	0.75	V
f <sub>T</sub>	Transition frequency	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA, f=100MHz	20	--	--	MHz
C <sub>C</sub>	Collector capacitance	V <sub>CB</sub> =20V, I <sub>E</sub> =0, f=1MHz	--	--	7	pF
C <sub>e</sub>	Emitter capacitance	V <sub>EB</sub> =0.5V, I <sub>C</sub> =0, f=1MHz	--	--	130	pF

**Typical Characteristics**




## SOT-223 Package information



Symbol	Dimensions in Millimeters(mm)		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	3.300	3.700	0.130	0.146
E1	6.700	7.300	0.264	0.287
e	2.300(BSC)		0.091(BSC)	
L	0.750	--	0.030	--
theta	0°	10°	0°	10°