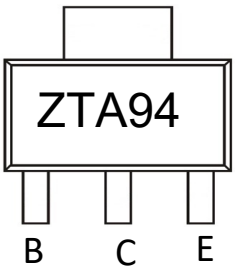
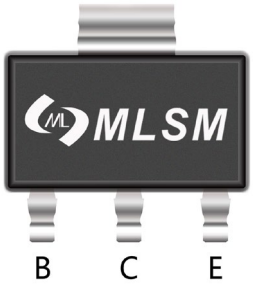
Features

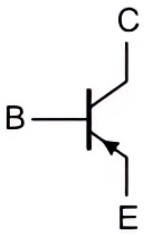
• High Voltage Driver Applications



Marking and pin assignment



SOT-223 top view



Schematic diagram

Pb-Free RoHS Halogen-Free

Maximum Ratings(Ta=25℃ 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	-5	V
I_C	Collector Current -Continuous	-0.2	A
I_{CM}	Peak Pulse Collector Current	-0.3	A
P_C	Collector Power Dissipation	1	W
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	125	°C/W
Tj, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

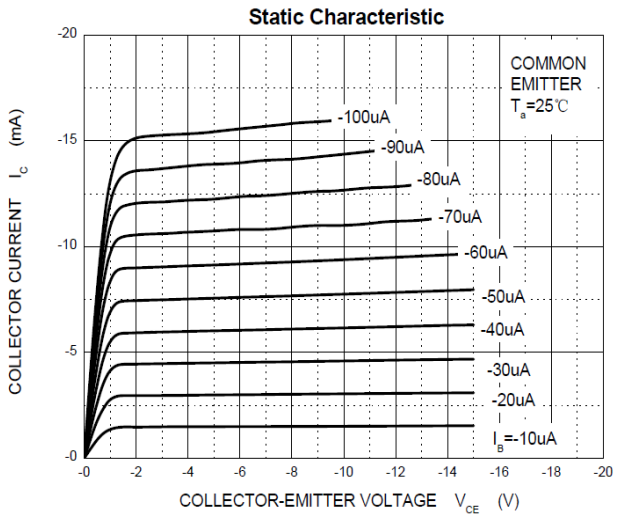
Ordering Information (Example)

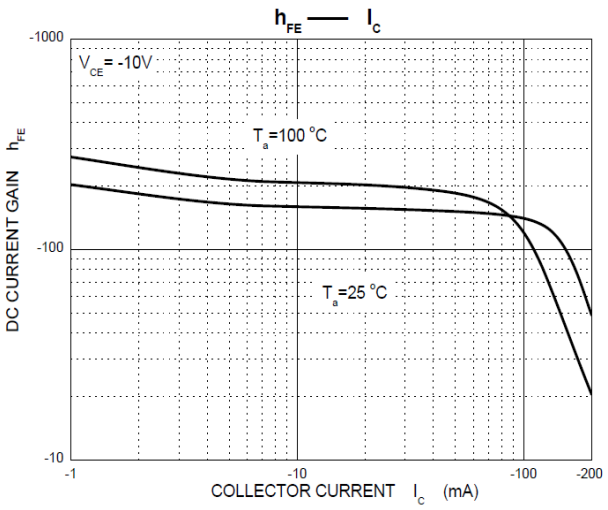
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PZTA94	SOT-223	ZTA94	2,500	5,000	35,000	13"reel

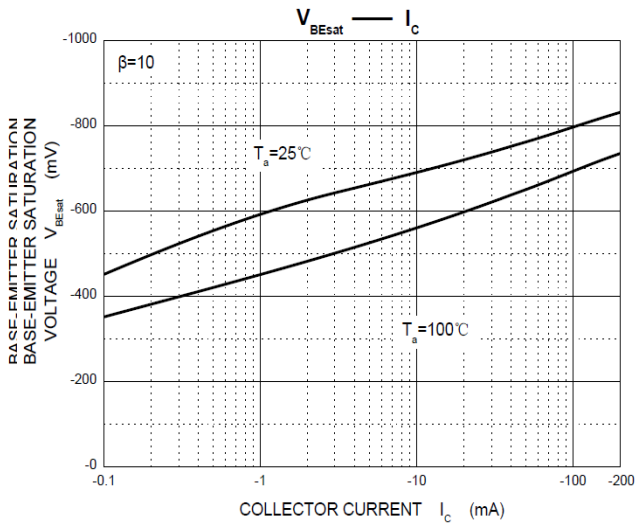
Electrical Characteristics (TJ=25℃ unless otherwise noted)

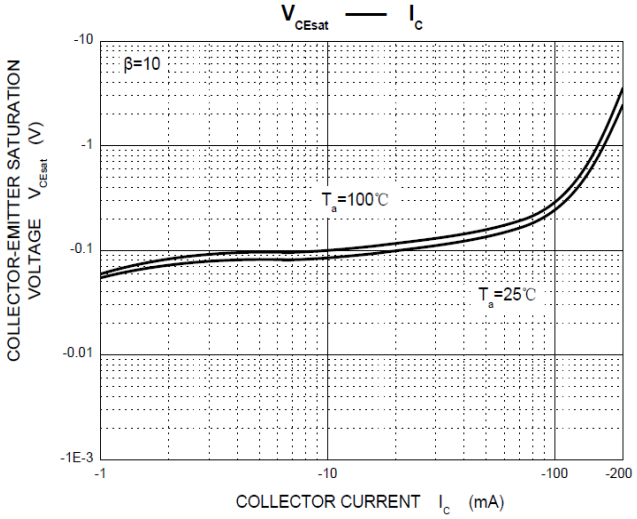
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=-0.1mA, I_E=0	-400	--	--	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=-1mA, I_B=0	-400	--	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=-0.1mA, I_C=0	-5	--	--	V
I_{CBO}	Collector cut-off current	V_{CB}=-400V , I_E=0	--	--	-100	nA
I_{CEO}	Collector cut-off current	V_{CE}=-400V,I_B=0	--	--	-5	μA
I_{EBO}	Emitter cut-off current	V_{EB}=-4V , I_C=0	--	--	-100	nA
h_{FE1}	DC current gain	V_{CE}=-10V, I_C=-10mA	80	--	300	--
h_{FE2}		V_{CE}=-10V, I_C=-1mA	70	--	--	
h_{FE3}		V_{CE}=-10V, I_C=-100mA	60			
h_{FE4}		V_{CE}=-10V, I_C=-50mA	80	--	--	
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=-10mA,I_B=-1mA	--	--	-0.2	V
		I_C=-50mA,I_B=-5mA	--	--	-0.3	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=-10mA, I_B=-1mA	--	--	-0.75	V
f_T	Transition frequency	V_{CE}=-20V, I_C=-10mA,f=30MHz	50	--	--	MHz

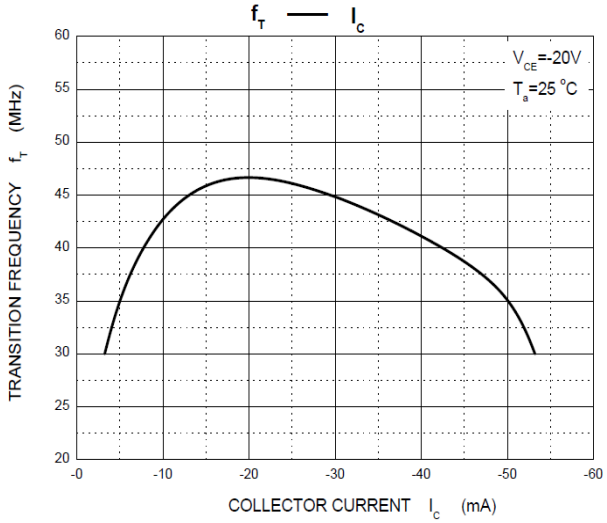
Typical Characteristics

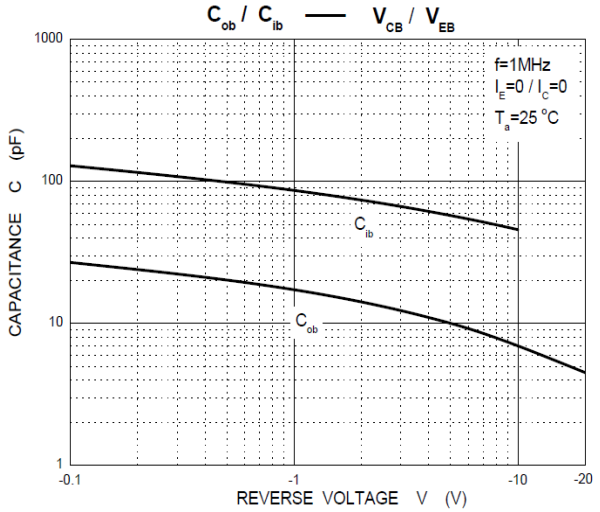


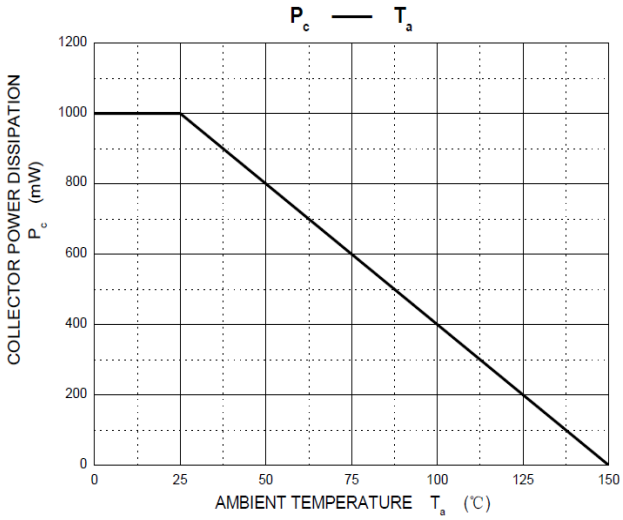




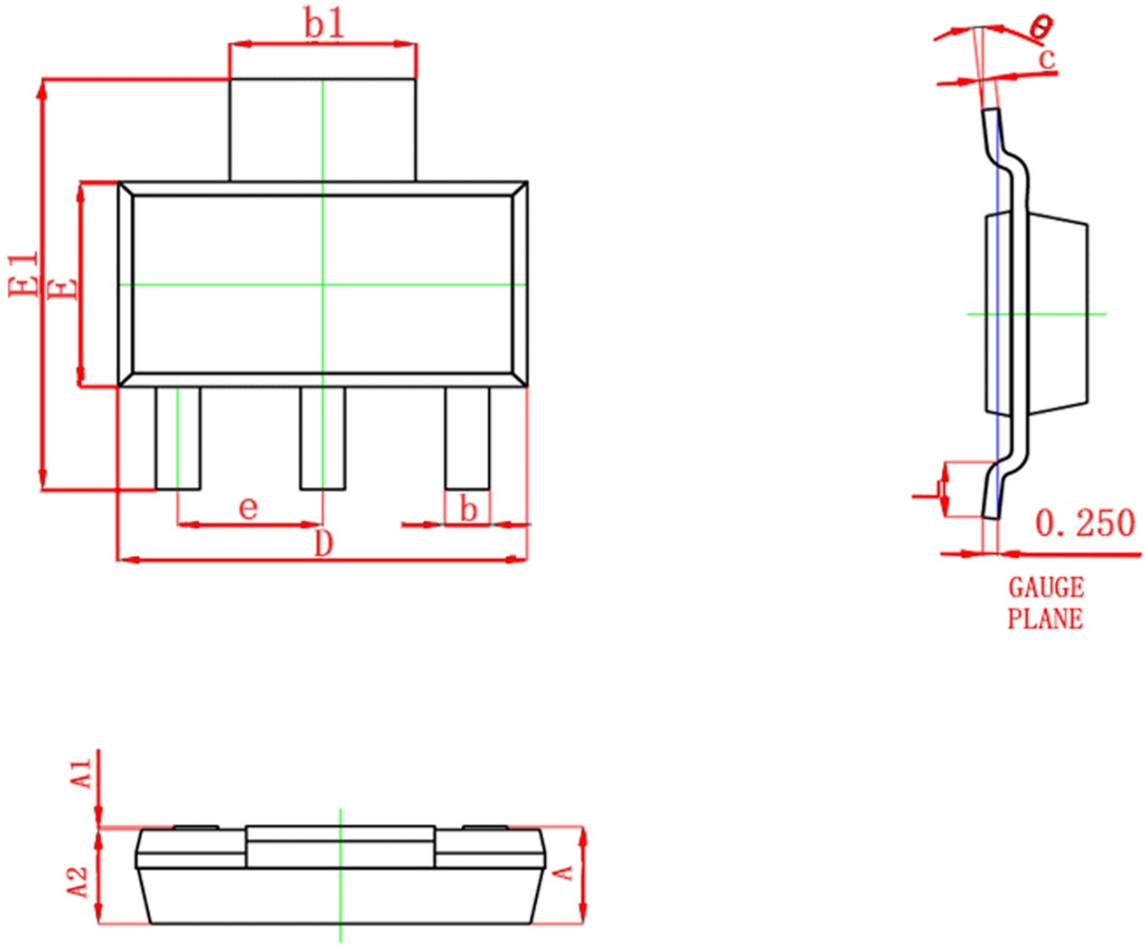








SOT-223 Package information



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	--
θ	0°	10°	0°	10°