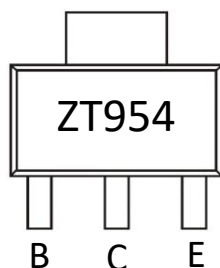


Features

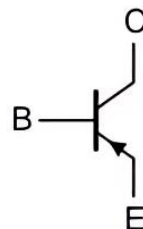
- High Voltage
- Low saturation voltages



Marking and pin assignment



SOT-223 top view



Schematic diagram



Halogen-Free

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

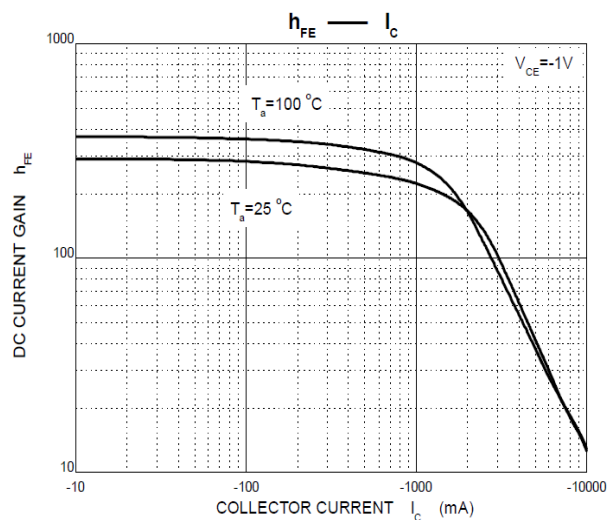
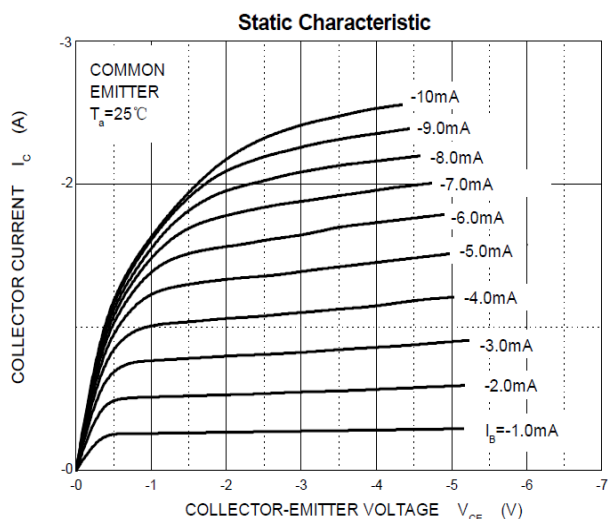
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-140	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current -Continuous	-5	A
I_{CM}	Peak Pulse Collector Current	-10	A
P_C	Collector Power Dissipation	0.8	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	156	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

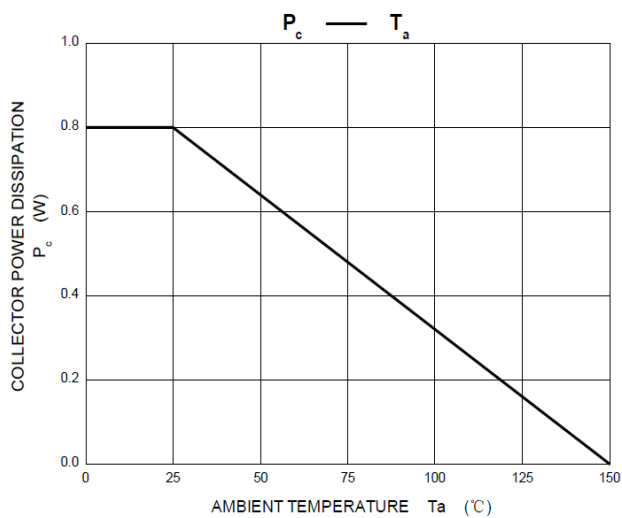
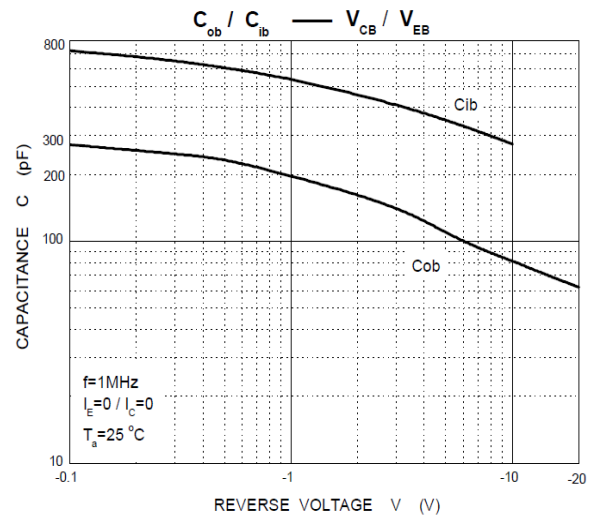
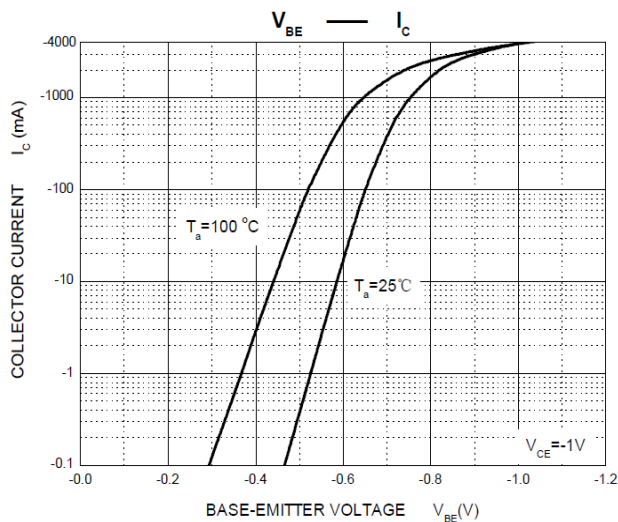
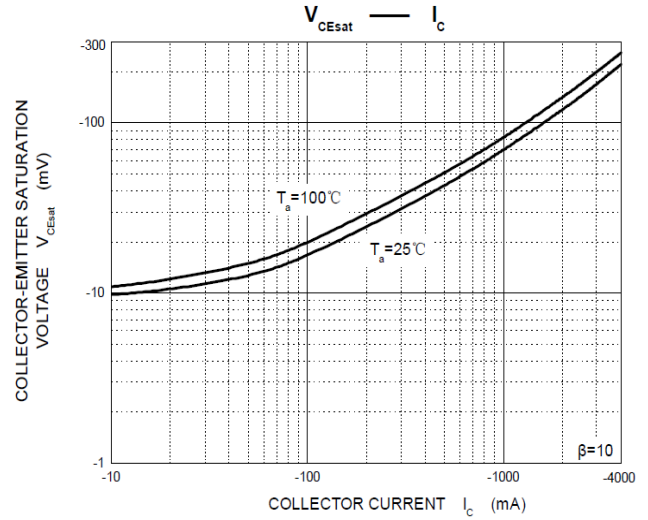
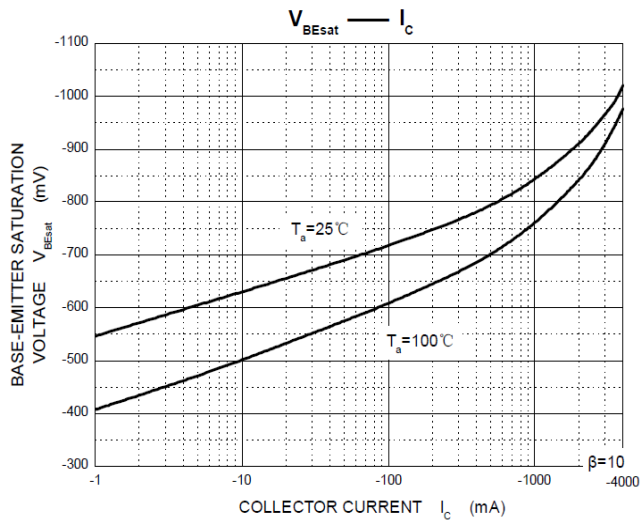
Ordering Information (Example)

Type	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
FZT954	ZT954	2,500	5,000	35,000	13"reel

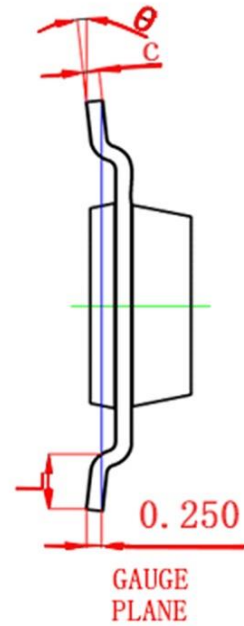
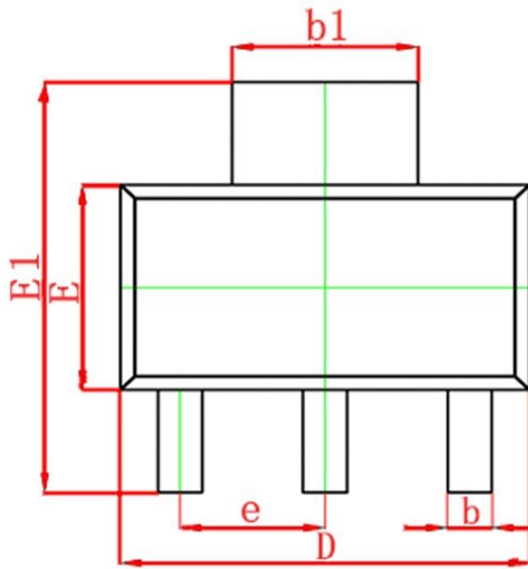
Electrical Characteristics (T_J=25°C unless otherwise noted)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-0.1mA, I _E =0	-140	--	--	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-1mA, I _B =0	-100	--	--	V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-0.1mA, I _C =0	-7	--	--	V
I _{CBO}	Collector cut-off current	V _{CB} =-100V, I _E =0	--	--	-20	nA
I _{EBO}	Emitter cut-off current	V _{CB} =-6V, I _C =0	--	--	-10	nA
h _{FE1}	DC current gain	V _{CE} =-1V, I _C =-10mA	100	--	--	--
h _{FE2}		V _{CE} =-1V, I _C =-1A	100	--	300	
h _{FE3}		V _{CE} =-1V, I _C =-3A	25	--	--	
h _{FE4}		V _{CE} =-1V, I _C =-4A	15	--	--	
h _{FE5}		V _{CE} =-1V, I _C =-10A	--	5	--	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =-100mA, I _B =-10mA	--	--	-30	mV
		I _C =-1A, I _B =-100mA	--	--	-90	mV
		I _C =-2A, I _B =-200mA	--	--	-150	mV
		I _C =-4A, I _B =-400mA	--	--	-340	mV
V _{BE(sat)}	Base-emitter saturation voltage	I _C =-4A, I _B =-400mA	--	--	-1.1	V
V _{BE}	Base-emitter voltage	V _{CE} =-1V, I _C =-4A	--	--	-1.1	V
f _T	Transition frequency	V _{CE} =-10V, I _C =-500mA, f=1MHz	3	--	--	MHz
C _{ob}	Collector output capacitance	V _{CB} =-10V, I _E =0, f=1MHz	--	70	--	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	--
θ	0°	10°	0°	10°