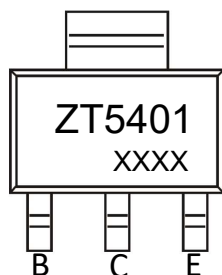


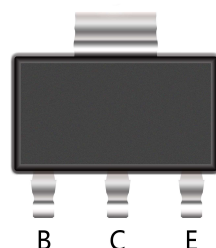
Features

- High Voltage
- High Voltage Amplifier Application

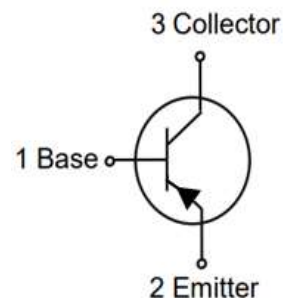


Marking and pin assignment

ZT5401: Device code
XXXX: Code



SOT-223 top view



Schematic diagram



Pb-Free



Halogen-Free

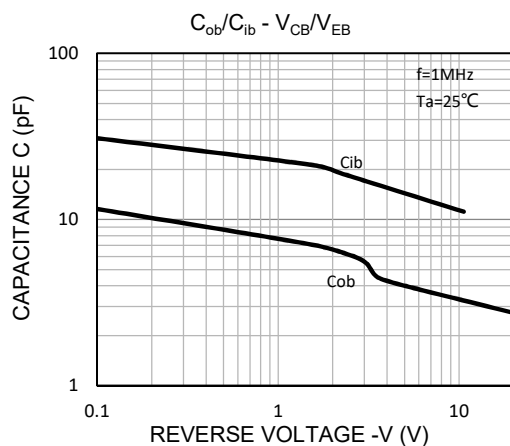
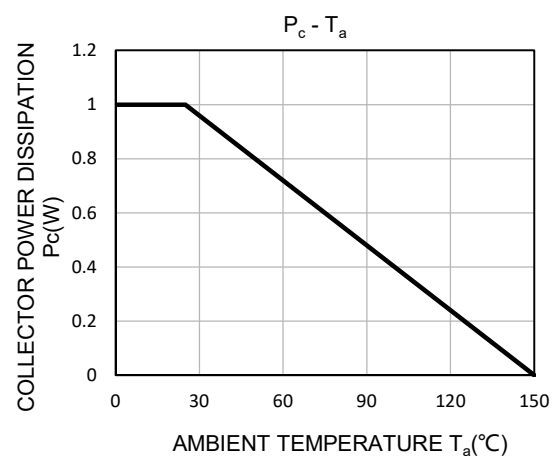
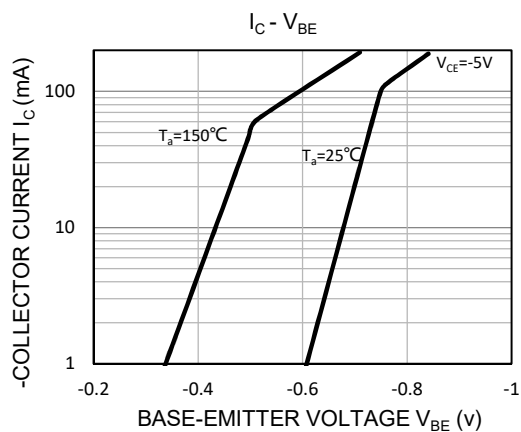
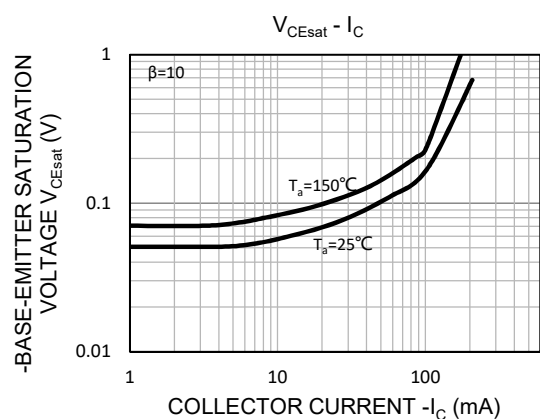
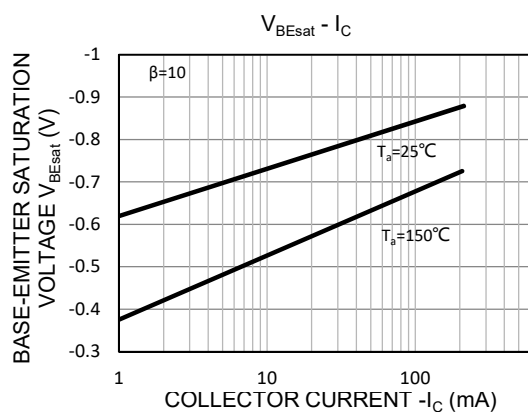
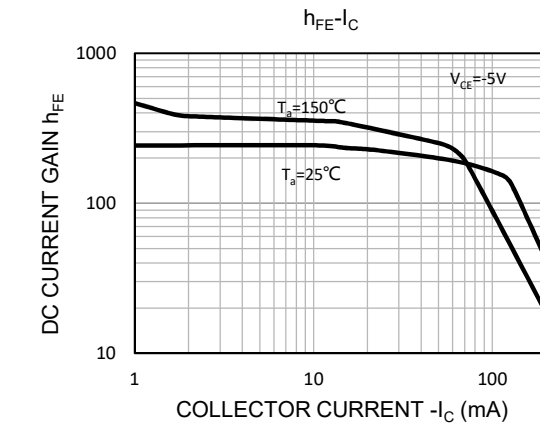
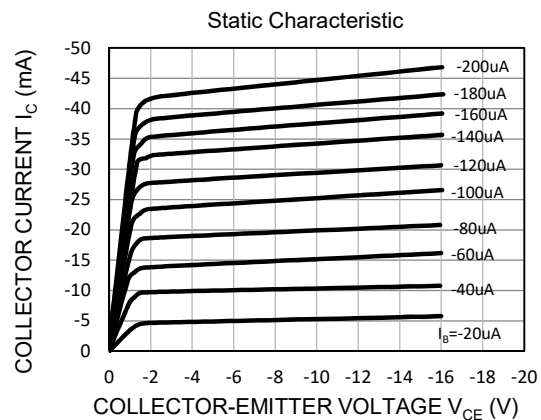
Maximum Ratings(Ta=25°C unless otherwise noted)

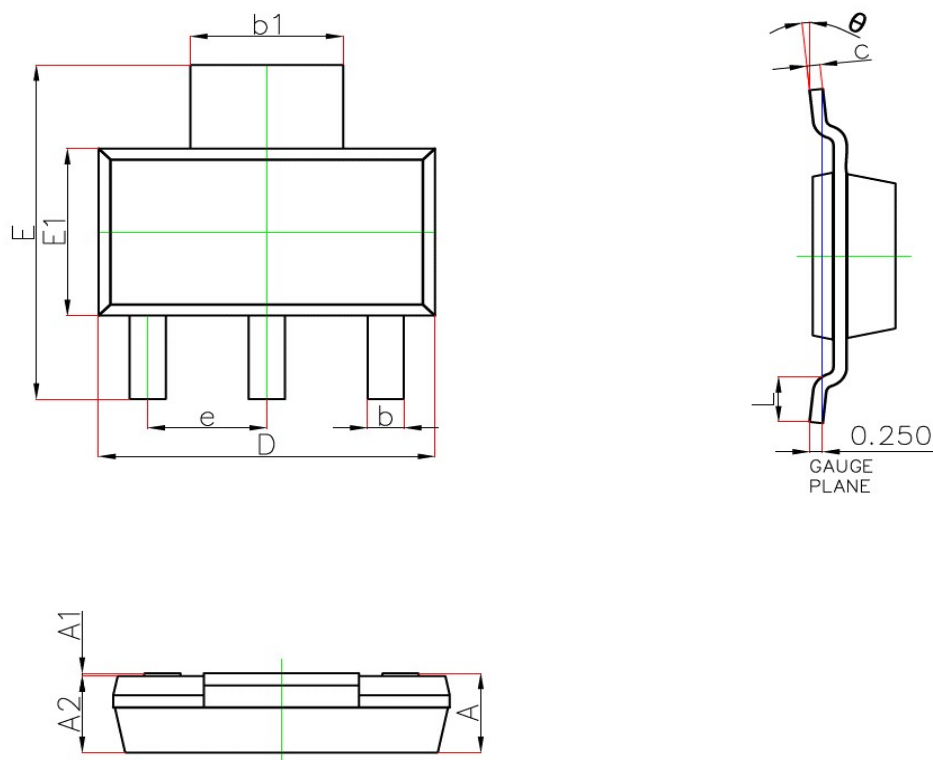
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.6	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance Junction-to-Ambient	125	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

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	-160	--	--	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-1mA, I _B =0	-150	--	--	V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-0.01mA, I _C =0	-5	--	--	V
I _{CBO}	Collector cut-off current	V _{CB} =-120V, I _E =0	--	--	-50	nA
I _{EBO}	Emitter cut-off current	V _{EB} = -3V, I _C =0	--	--	-50	nA
h _{FE(1)}	DC current gain	V _{CE} =-5V, I _C = -1mA	50	--	--	
h _{FE(2)}	DC current gain	V _{CE} =-5V, I _C = -10mA	100	--	300	
h _{FE(3)}	DC current gain	V _{CE} =-5V, I _C = -50mA	50	--	--	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =-10mA, I _B = -1mA	--	--	-0.2	V
	Collector-emitter saturation voltage	I _C =-50mA, I _B = -5mA	--	--	-0.5	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =-10mA, I _B = -1mA	--	--	-1	V
	Base-emitter saturation voltage	I _C =-50mA, I _B = -5mA	--	--	-1	V
f _T	Transition frequency	V _{CE} =-10V, I _C = -10mA, f=100MHz	100	--	300	MHz
C _{ob}	Collector output capacitance	V _{CB} =-10V, I _E =0, f=1MHz	--	--	6	pF

Typical Operating 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	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°