FZT955 TRANSISTOR (PNP)

FEATURES

- High Voltage
- Low saturation voltages

SOT-223

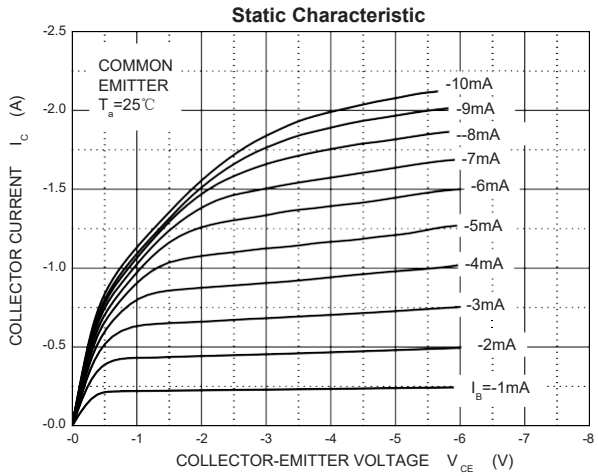
1.BASE
2.COLLECTOR
3.EMITTER

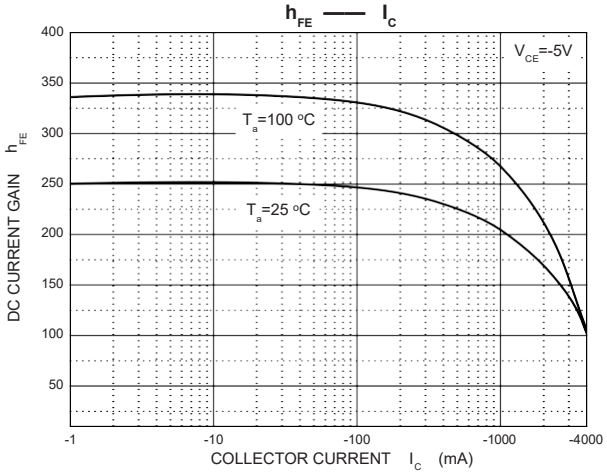
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

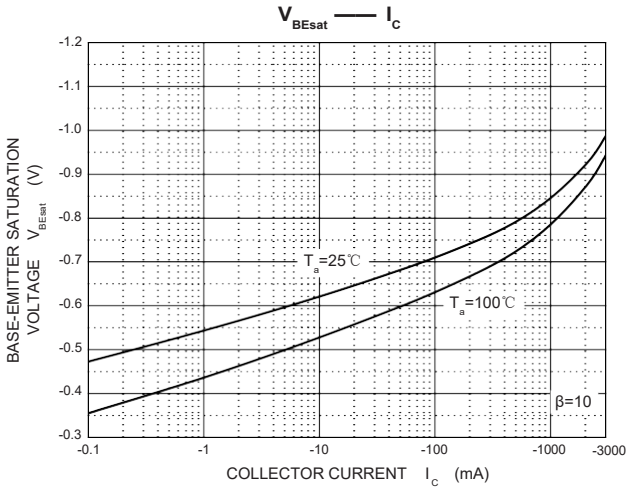
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-180	V
V_{CEO}	Collector-Emitter Voltage	-140	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-4	A
P_C	Collector Power Dissipation	0.8	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	156	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

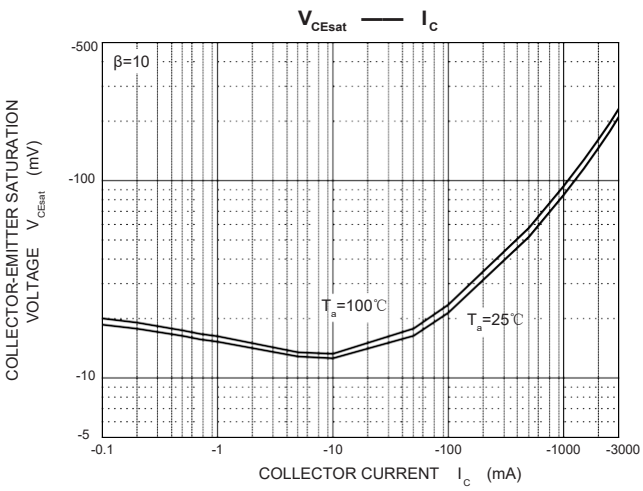
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

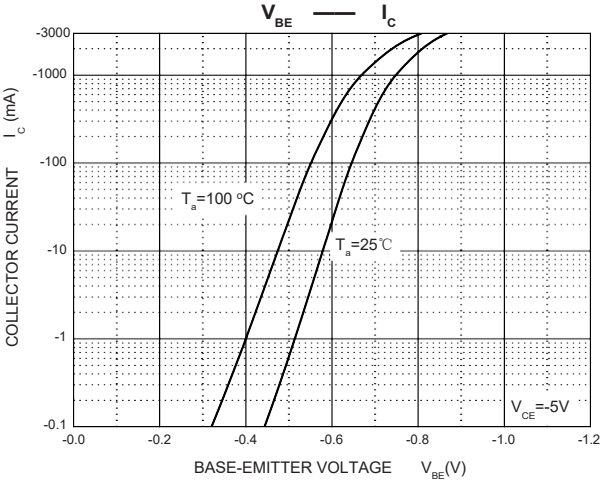
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-0.1mA,I_E=0	-180			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-140			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-0.1mA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-150V,I_E=0			-50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-6V,I_C=0			-10	nA
DC current gain	$h_{FE(1)}$	V_{CE}=-5V, I_C=-10mA	100			
	$h_{FE(2)}$	V_{CE}=-5V, I_C=-1A	100		300	
	$h_{FE(3)}$	V_{CE}=-5V, I_C=-3A	75			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-5mA			-60	mV
		I_C=-500mA,I_B=-50mA			-120	mV
		I_C=-1A,I_B=-100mA			-150	mV
		I_C=-3A,I_B=-300mA			-370	mV
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-3A,I_B=-300mA			-1.11	V
Base-emitter voltage	V_{BE}	V_{CE}=-5V, I_C=-3A			-0.95	V
Transition frequency	f_T	V_{CE}=-10V,I_C=-100mA, f=50MHz		70		MHz
Collector output capacitance	C_{ob}	V_{CB}=-20V, I_E=0, f=1MHz		40		pF
Switching Times	t_{on}	V_{CC}=-50V, I_C=-1A, I_{B1}= I_{B2}=-100mA		68		ns
	t_{off}			1030		ns

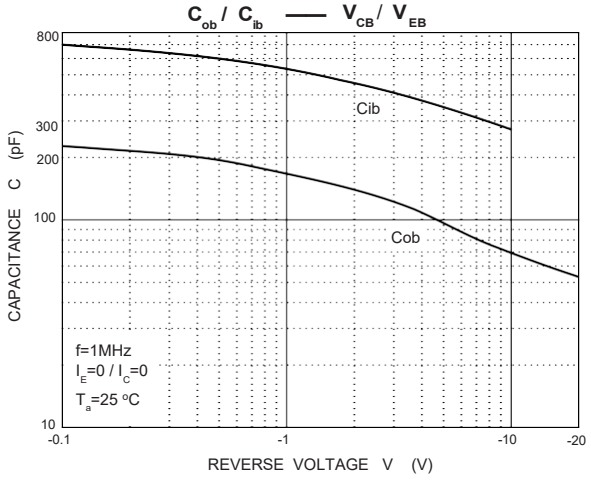

Static Characteristic
COMMON
EMITTER
Ta=25℃
-10mA
-9mA
-8mA
-7mA
-6mA
-5mA
-4mA
-3mA
-2mA
IB=-1mA
COLLECTOR CURRENT IC (A)
COLLECTOR-EMITTER VOLTAGE VCE (V)

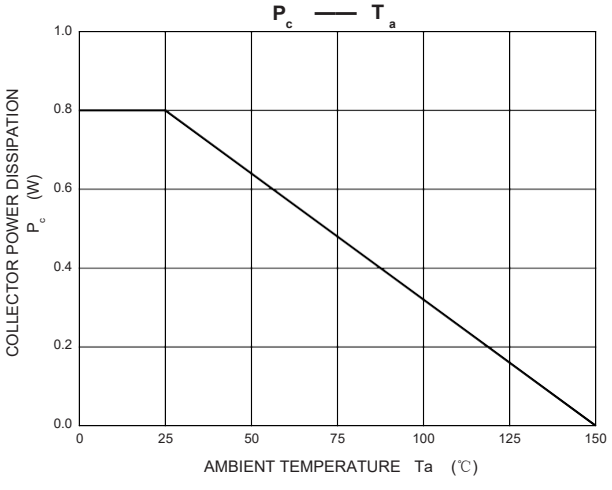

hFE — IC
VCE=-5V
Ta=100 ℃
Ta=25 ℃
DC CURRENT GAIN hFE
COLLECTOR CURRENT IC (mA)


VBEsat — IC
Ta=25℃
Ta=100℃
β=10
BASE-EMITTER SATURATION VOLTAGE VBEsat (V)
COLLECTOR CURRENT IC (mA)


VCEsat — IC
β=10
Ta=100℃
Ta=25℃
COLLECTOR-EMITTER SATURATION VOLTAGE VCEsat (mV)
COLLECTOR CURRENT IC (mA)


VBE — IC
Ta=100 ℃
Ta=25℃
VCE=-5V
COLLECTOR CURRENT IC (mA)
BASE-EMITTER VOLTAGE VBE(V)


Cob / Cib — VCB / VEB
Cib
Cob
f=1MHz
IE=0 / IC=0
Ta=25 ℃
CAPACITANCE C (pF)
REVERSE VOLTAGE V (V)


Pc — Ta
COLLECTOR POWER DISSIPATION Pc (W)
AMBIENT TEMPERATURE Ta (℃)