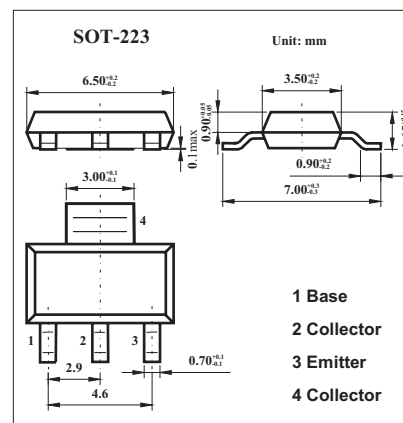


PNP Silicon High Voltage Transistor

FZT593

■ Features

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■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-120	V
Collector-Emitter Voltage	V_{CE0}	-100	V
Emitter-Base Voltage	V_{EB0}	-5	V
Peak Pulse Current	I_{CM}	-2	A
Continuous Collector Current	I_C	-1	A
Base Current	I_B	-200	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	P_{tot}	2	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

FZT593■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ.	Max	Unit
Breakdown Voltages	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$	-120			V
Breakdown Voltages	$V_{(BR)CEO}$	$I_C = -10\text{mA}^*$	-100			V
Breakdown Voltages	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}$	-5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -100\text{V}$			-100	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -4\text{V}$			-100	nA
Collector-Emitter Cut-Off Current	I_{CES}	$V_{CE} = -100\text{V}$			-100	nA
Saturation Voltages	$V_{CE(sat)}$	$I_C = -250\text{mA}, I_B = -25\text{mA}^*$			-0.2	V
		$I_C = -500\text{mA}, I_B = -50\text{mA}^*$			-0.3	V
	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}^*$			-1.1	V
Base-Emitter Turn-on Voltage	$V_{BE(on)}$	$I_C = -1\text{mA}, V_{CE} = -5\text{V}^*$			-1.0	V
Static Forward Current Transfer Ratio	h_{FE}	$I_C = -1\text{mA}, V_{CE} = -5\text{V}$	100			
		$I_C = -250\text{mA}, V_{CE} = -5\text{V}^*$	100			
		$I_C = -500\text{mA}, V_{CE} = -5\text{V}^*$	100	300		
		$I_C = -1\text{A}, V_{CE} = -5\text{V}^*$	50			
Transition Frequency	f_T	$I_C = -50\text{mA}, V_{CE} = -10\text{V}, f = 100\text{MHz}$	50			MHz
Output Capacitance	C_{obo}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		5		pF

* Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

■ Marking

Marking	FZT593
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