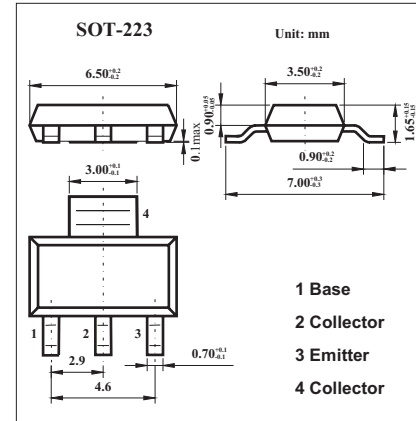


NPN Silicon Planar Medium Power Transistor

FZT657

■ Features

- Low saturation voltage

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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	1	A
Continuous Collector Current	I_C	0.5	A
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	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ.	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}$	300			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}^*$	300			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}$	5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=200\text{V}$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=3\text{V}$			0.1	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}^*$			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}^*$			1.0	V
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	$I_C=100\text{mA}, V_{CE}=5\text{V}^*$			1.0	V
Static Forward Current Transfer Ratio	h_{FE}	$I_C=10\text{mA}, V_{CE}=5\text{V}^*$	40			
		$I_C=100\text{mA}, V_{CE}=5\text{V}^*$	50			
Transition Frequency	f_T	$I_C=10\text{mA}, V_{CE}=20\text{V}, f=20\text{MHz}$	30			MHz
Output Capacitance	C_{ob0}	$V_{CB}=20\text{V}, f=1\text{MHz}$			20	pF

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

■ Marking

Marking	FZT657
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