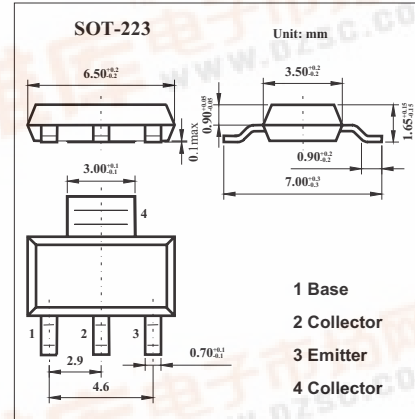


SMD Type Transistors

NPN Silicon Planar High Voltage Transistor
FZT955;FZT956

■ Features

- 4 Amps continuous current
- Very low saturation voltages
- Excellent gain characteristics specified up to 3 Amps



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	FZT955	FZT956	Unit
Collector-Base Voltage	V _{CB0}	-180	-220	V
Collector-Emitter Voltage	V _{CE0}	-140	-200	V
Emitter-Base Voltage	V _{EB0}	-6	-6	V
Peak Pulse Current	I _{CM}	-10	-5	A
Continuous Collector Current	I _C	-4	-2	A
Power Dissipation at T _{amb} =25°C	P _{tot}	3	3	W
Operating and Storage Temperature Range	T _j :T _{stg}	-55 to +150	-55 to +150	°C

FZT955;FZT956

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _c =-100μA	-180	-210		V
Collector-Emitter Breakdown Voltage	V _{(BR)CER}	I _c =-1μA, R _B ≤ 1kΩ	-180	-210		V
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _c =-10mA*	-140	-170		V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E =-100μA	-6	-8		V
Collector Cut-Off Current	I _{CBO}	V _{CB} =-150V			-50	nA
		V _{CB} =-150V, T _{amb} =100°C			-1	μA
Collector Cut-Off Current (R ≤ 1kΩ)	I _{CER}	V _{CB} =-150V			-50	nA
		V _{CB} =-150V, T _{amb} =100°C			-1	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =-6V			-10	nA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _c =-100mA, I _B =-5mA*		-30	-60	mV
		I _c =-500mA, I _B =-50mA*		-70	-120	mV
		I _c =-1A, I _B =-100mA*		-110	-150	mV
		I _c =-3A, I _B =-300mA*		-275	-370	mV
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _c =-3A, I _B =-300mA*		-970	-1110	mV
Base-Emitter Turn-On Voltage	V _{BE(on)}	I _c =-3A, V _{CE} =-5V*		-830	-950	mV
Static Forward Current Transfer Ratio	h _{FE}	I _c =-10mA, V _{CE} =-5V*	100	200		
		I _c =-1A, V _{CE} =-5V*	100	200	300	
		I _c =-3A, V _{CE} =-5V*	75	140		
		I _c =-10A, V _{CE} =-5V*		10		
Transition Frequency	f _T	I _c =-100mA, V _{CE} =-10V, f=50MHz		110		MHz
Output Capacitance	C _{obo}	V _{CB} =-20V, f=1MHz		40		pF
Switching Times	t _{on}	I _c =-1A, I _{B1} =-100mA		68		ns
	t _{off}	I _{B2} =100mA, V _{CC} =-50V		1030		ns

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%