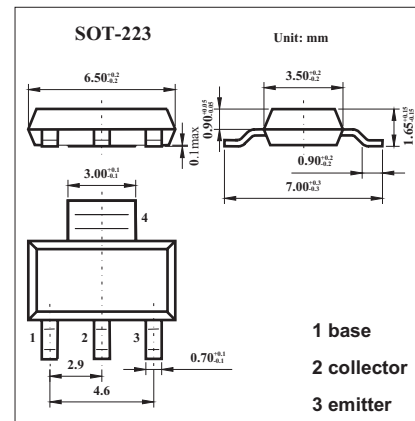


PNP Silicon Planar High Current Transistors

FZT953

■ Features

- 5 Amps continuous current , up to 15 Amps peak current.
- Very low saturation voltages.
- Excellent gain characteristics specified up to 10 Amps.
- $P_{tot} = 3$ watts.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-140	V
Collector-emitter voltage	V_{CE0}	-100	V
Emitter-base voltage	V_{EB0}	-6	V
Continuous collector current	I_{CM}	-10	A
Peak pulse current	I_C	-5	A
Power dissipation	P_{tot}	3	W
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

FZT953

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC=-100μA	-140	-170		V
Collector-emitter breakdown voltage *	V(BR)CEO	IC=-10mA	-100	-120		V
Emitter-base breakdown voltage	V(BR)EBO	IE=-100μA	-6	-8		V
Collector Cut-Off Current	ICBO	VCB=-100V VCB=-100V, Ta = 100°C			-50 -1	nA μA
Emitter Cut-Off Current	IEBO	VEB=-6V			-10	nA
Collector-emitter saturation voltage *	VCE(sat)	IC=-100mA, IB=-10mA IC=-1A, IB=-100mA IC=-2A, IB=-200mA IC=-4A, IB=-400mA		-20 -90 -160 -300	-50 -115 -220 -420	mV
Base-emitter saturation voltage *	VBE(sat)	IC=-4A, IB=-400mA		-1010	-1170	mV
Base-emitter ON voltage *	VBE(on)	IC=-4A, VCE=-1V		-925	-1160	mV
Static Forward Current Transfer *	hFE	IC=-10mA, VCE=-1V*	100	200		
		IC=-1A, VCE=-1V*	100	200	300	
		IC=-3A, VCE=-1V*	50	90		
		IC=-4A, VCE=-1V*	30	50		
		IC=-10A, VCE=-1V*		15		
Transitional frequency	fT	IC=-100mA, VCE=-10V, f=50MHz		125		MHz
Output capacitance	Cobo	VCB=-10V, f=1MHz		65		pF
Turn-on time	t(on)	IC=-2A, VCC=-10V		110		ns
Turn-off time	t(off)	IB1=IB2=-200mA		460		ns

* Pulse test: tp = 300 μs; d ≤ 0.02.