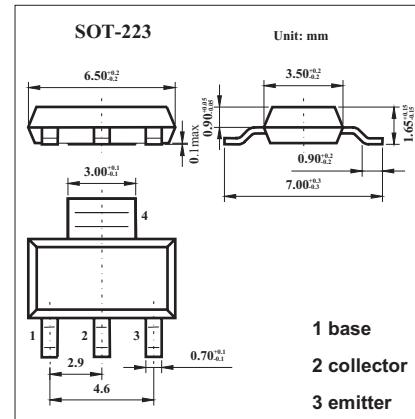


PNP Silicon Planar High Current Transistors

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	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA	-140	-170		V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =-10mA	-100	-120		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA	-6	-8		V
Collector Cut-Off Current	I _{CBO}	V _{CB} =-100V V _{CB} =-100V, T _a = 100°C			-50 -1	nA μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =-6V			-10	nA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =-100mA, I _B =-10mA I _C =-1A, I _B =-100mA I _C =-2A, I _B =-200mA I _C =-4A, I _B =-400mA		-20 -90 -160 -300	-50 -115 -220 -420	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =-4A, I _B =-400mA		-1010	-1170	V
Base-emitter ON voltage *	V _{BE(on)}	I _C =-4A, V _{CE} =-1V		-925	-1160	V
Static Forward Current Transfer *	h _{FE}	I _C =-10mA, V _{CE} =-1V*	100	200		
		I _C =-1A, V _{CE} =-1V*	100	200	300	
		I _C =-3A, V _{CE} =-1V*	50	90		
		I _C =-4A, V _{CE} =-1V*	30	50		
		I _C =-10A, V _{CE} =-1V*		15		
Transitional frequency	f _T	I _C =-100mA, V _{CE} =-10V, f=50MHz		125		MHz
Output capacitance	C _{obo}	V _{CB} =-10V, f=1MHz		65		pF
Turn-on time	t _(on)	I _C =-2A, V _{CC} =-10V		110		ns
Turn-off time	t _(off)	I _{B1} =I _{B2} =-200mA		460		ns

* Pulse test: t_p = 300 μs; d ≤ 0.02.