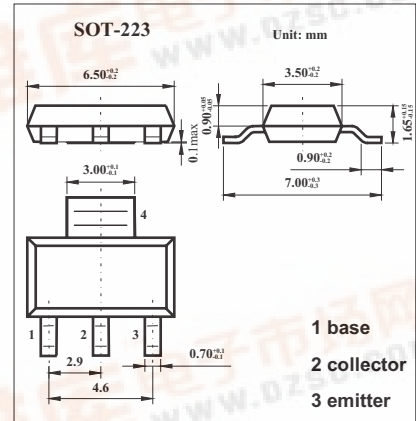


SMD Type Transistors

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.
- Ptot = 3 watts.



■ Absolute Maximum Ratings Ta = 25°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	°C

FZT953

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu A$	-140	-170		V
Collector-emitter breakdown voltage *	$V_{(BR)CEO}$	$I_C = -10mA$	-100	-120		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu A$	-6	-8		V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -100V$ $V_{CB} = -100V, T_a = 100^\circ C$			-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: $t_p = 300\mu s$; $d \leq 0.02$.