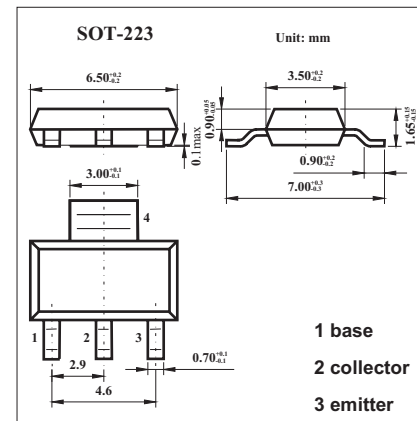


## PNP Silicon Planar High Current (High Performance) Transistor

### FZT949

#### ■ Features

- Extremely low equivalent on-resistance;  $R_{CE(sat)}$ .
- 6 Amps continuous current.
- Up to 20 Amps peak current.
- Very low saturation voltage.
- Excellent hFE characteristics specified upto 20 Amps.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-50	V
Collector-emitter voltage	$V_{CEO}$	-30	V
Emitter-base voltage	$V_{EBO}$	-6	V
Continuous collector current	$I_{CM}$	-20	A
Peak pulse current	$I_c$	-5.5	A
Power dissipation	$P_{tot}$	3	W
Operating and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^\circ\text{C}$

## FZT949

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC=-100μA	-50	-80		V
Collector-emitter breakdown voltage *	V(BR)CEO	IC=-10mA	-30	-45		V
Emitter-base breakdown voltage	V(BR)EBO	IE=-100μA	-50	-80		V
Collector Cut-Off Current	ICBO	VCB=-40V VCB=-40V, Ta = 100°C			-50 -1	nA μA
Emitter Cut-Off Current	IEBO	VEB=-6V			-10	nA
Collector-emitter saturation voltage *	VCE(sat)	IC=-0.5A, IB=-10mA* IC=-2A, IB=-200mA* IC=-4A, IB=-400mA* IC=-6A, IB=-250mA*		-50 -85 -190 -350	-75 -140 -270 -440	mV
Base-emitter saturation voltage *	VBE(sat)	IC=-5.5A, IB=-500mA		-1100	-1250	mV
Base-emitter ON voltage *	VBE(on)	IC=-5.5A, VCE=-1V		-900	-1060	mV
Static Forward Current Transfer Ratio	hFE	IC=-10mA, VCE=-1V	100	200		
		IC=-1A, VCE=-1V*	100	200	300	
		IC=-5A, VCE=-1V*	75	140		
		IC=-20A, VCE=-2V*		35		
Transitional frequency	fT	IC=-100mA, VCE=-10V, f=50MHz		100		MHz
Output capacitance	Cobo	VCB=-10V, f=1MHz		122		pF
Turn-on time	t(on)	IC=-4A, VCC=-10V		120		ns
Turn-off time	t(off)	IB1=IB2=-400mA		130		ns

\* Pulse test: tp = 300 μs; d ≤ 0.02.