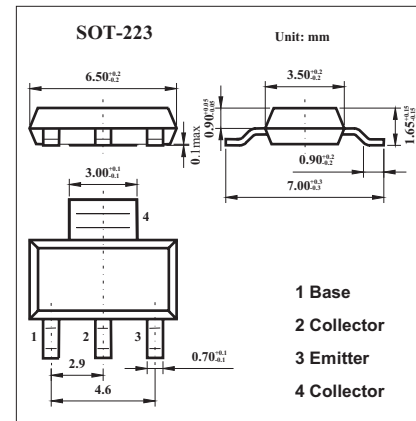


## PNP Silicon Planar Medium Power Transistor

## FZT753

## ■ Features

- Low saturation voltage
- Excellent hFE specified up to 2A

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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-120	V
Collector-Emitter Voltage	$V_{CE0}$	-100	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Peak Pulse Current	$I_{CM}$	-6	A
Continuous Collector Current	$I_C$	-2	A
Power Dissipation at $T_{amb}=25^\circ\text{C}$	$P_{tot}$	2	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

## FZT753

## ■ Electrical Characteristics Ta = 25°C unless otherwise stated

Parameter	Symbol	Test conditions	Min	Typ.	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu A$	-120			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA^*$	-100			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu A$	-5			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = -100V$			-0.1	$\mu A$
		$V_{CB} = -100V, T_{amb} = 100^\circ C$			-10	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = -4V$			-0.1	$\mu A$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -100mA^*$		-0.17	-0.3	V
		$I_C = -2A, I_B = -200mA^*$		-0.30	-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -1A, I_B = -100mA^*$		-0.9	-1.25	V
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	$I_C = -1A, V_{CE} = -2V^*$		-0.8	-1.0	V
Static Forward Current Transfer Ratio	$h_{FE}$	$I_C = -50mA, V_{CE} = -2V^*$	70	200		
		$I_C = -500mA, V_{CE} = -2V^*$	100	200	300	
		$I_C = -1A, V_{CE} = -2V^*$	55	170		
		$I_C = -2A, V_{CE} = -2V^*$	25	55		
Transition Frequency	$f_T$	$I_C = -100mA, V_{CE} = -5V, f = 100MHz$	100	140		MHz
Output Capacitance	$C_{obo}$	$V_{CB} = -10V, f = 1MHz$			30	pF
Switching Times	$t_{on}$	$I_C = -500mA, V_{CC} = -10V, I_{B1} = I_{B2} = -50mA$		40		ns
	$t_{off}$			600		ns

\* Measured under pulsed conditions. Pulse Width=300 $\mu s$ . Duty cycle  $\leq 2\%$

## ■ Marking

Marking	FZT753
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