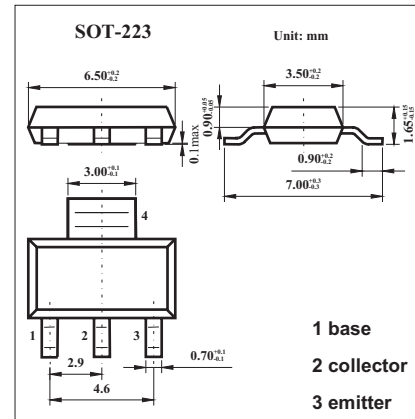


High Performance Transistor

FZT751

■ Features

- 60 Volt V_{CE0} .
- 3 Amp continuous current.
- Low saturation voltage.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-80	V
Collector-emitter voltage	V_{CE0}	-60	V
Emitter-base voltage	V_{EB0}	-5	V
Continuous collector current	I_{CM}	-6	A
Peak pulse current	I_C	-3	A
Power dissipation	P_{tot}	2	W
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

FZT751

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA	-80			V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =-10mA	-60			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA	-5			V
Collector Cut-Off Current	I _{CBO}	V _{CB} =-60V V _{CB} =-60V, T _a = 100°C			-0.1 -10	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =-4V			-0.1	μA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =-1A, I _B =-100mA I _C =-3A, I _B =-300mA		-0.15 -0.45	-0.3 -0.6	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =-1A, I _B =-100mA		-0.9	-1.25	V
Base-emitter ON voltage *	V _{BE(on)}	I _C =-1A, V _{CE} =-2V		-0.8	-1.0	V
Collector Cut-Off 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*	80	170		
		I _C =-2A, V _{CE} =-2V*	40	150		
Transitional 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
Turn-on time	t _(on)	I _C =-500mA, V _{CC} =-10V		40		ns
Turn-off time	t _(off)	I _{B1} =I _{B2} =-50mA		450		ns

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

Marking	FZT751
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