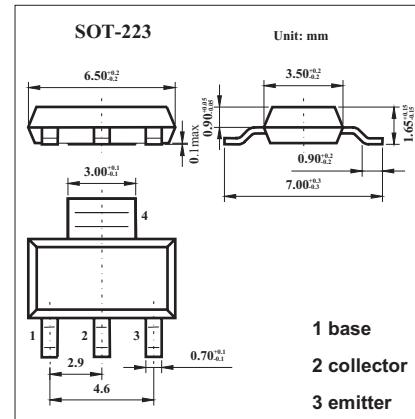


PNP Silicon Planar Medium Power High Gain Transistor

FZT790A

■ Features

- Low equivalent on-resistance; $R_{CE(sat)}$ 125m Ω at 2A.
- Gain of 200 at $I_C=1$ Amps and Very low saturation voltage.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-50	V
Collector-emitter voltage	V_{CE0}	-40	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	$^\circ\text{C}$

FZT790A

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Breakdown Voltages	V(BR)CBO	Ic=-100μA	-50	-70		V
Breakdown Voltages	V(BR)CEO	Ic=-10mA	-40	-60		V
Breakdown Voltages	V(BR)EBO	Ie=-100μA	-5	-8.5		V
Collector Cut-Off Current	IcBO	Vcb=-30V Vcb=-30V, Ta = 100°C			-0.1 -10	μA
Emitter Cut-Off Current	IeBO	VEB=-4V			-0.1	μA
Collector-Emitter Saturation Voltage *	VCE(sat)	Ic=-500mA, Ib=-5mA Ic=-1A, Ib=-10mA Ic=-2A, Ib=-50mA		-0.15 -0.30 -0.40	-0.25 -0.45 -0.75	V
Base-Emitter Saturation Voltage *	VBE(sat)	Ic=-1A, Ib=-10mA		-0.8	-1.0	V
Base-Emitter Turn-On Voltage *	VBE(on)	Ic=-1A, VCE=-2V		-0.75		V
Static Forward Current Transfer Ratio	hFE	Ic=-10mA, VCE=-2V	300		800	
		Ic=-500mA, VCE=-2V*	250			
		Ic=-1A, VCE=-2V*	200			
		Ic=-2A, VCE=-2V*	150			
Transitional frequency	fT	Ic=-50mA, VCE=-5V, f=50MHz	100			MHz
Output capacitance	Cobo	Vcb=-10V, f=1MHz		24		pF
Turn-on time	t(on)	Ic=-500mA, Vcc=-10V		35		ns
Turn-off time	t(off)	Ib1=Ib2=-50mA		600		ns

* Pulse test: tp = 300 μs; d ≤ 0.02.

■ Marking

Marking	FZT790A
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