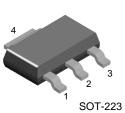


SEMICONDUCTOR

FZT790A

PNP Low Saturation Transistor

• These devices are designed with high current gain and low saturation voltage with collector currents up to 3A continuous.



FZT790A

1. Base 2.4. Collector 3. Emitter

Absolute Maximum Ratings * T_C=25°C unless otherwise noted

Parameter	Value	Units
Collector-Emitter Voltage	-40	V
Collector-Base Voltage	-50	V
Emitter-Base Voltage	-5	V
Collector Current - Continuous	-3	А
Operating and Storage Junction Temperature Range	- 55 ~ +150	°C
	Collector-Emitter Voltage Collector-Base Voltage Emitter-Base Voltage Collector Current - Continuous	Collector-Emitter Voltage -40 Collector-Base Voltage -50 Emitter-Base Voltage -5 Collector Current - Continuous -3

NOTES:

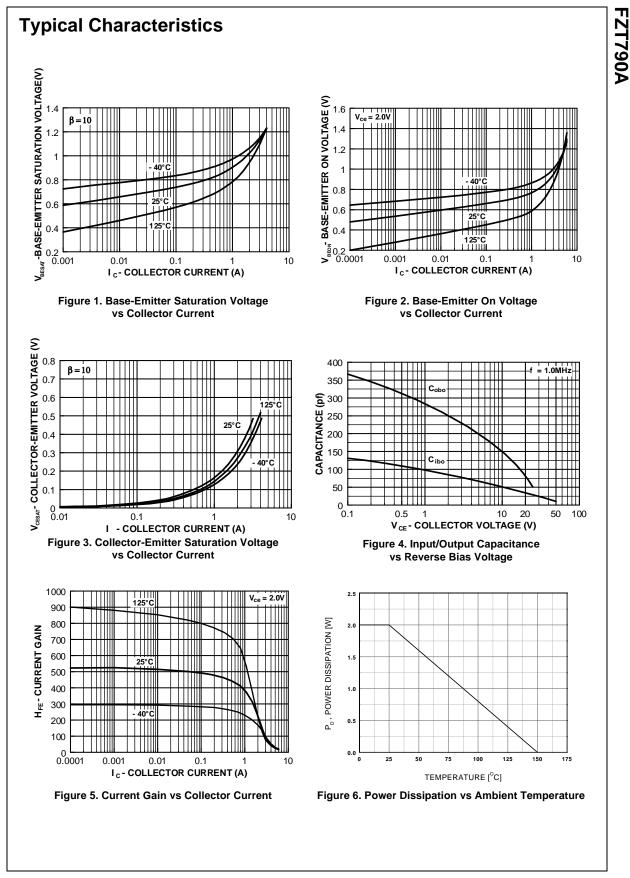
These ratings are based on a maximum junction temperature of 150degrees C.
These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Electrical Characteristics T_A=25°C unless otherwise noted

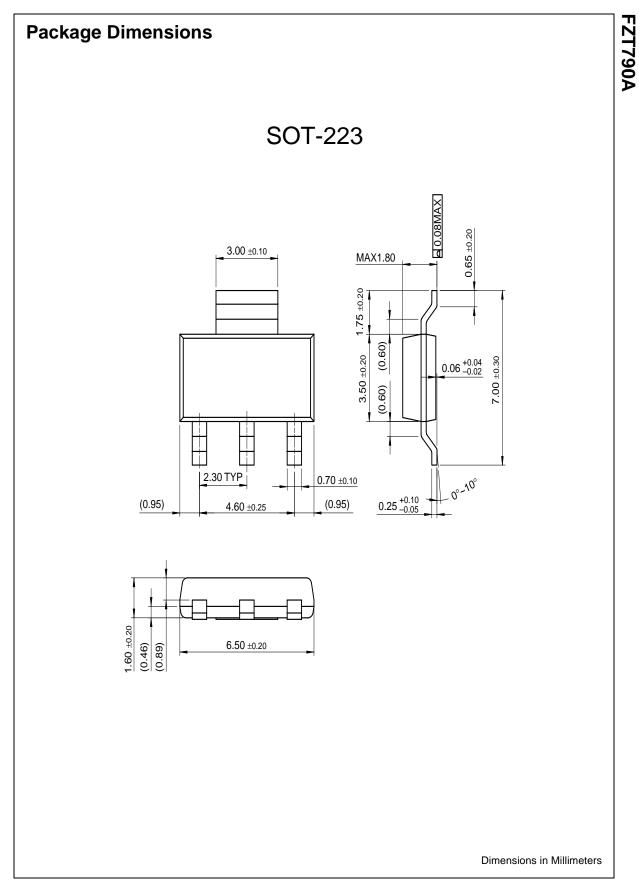
Symbol	Parameter	Test Conditions	Min.	Max.	Units
Off Characte	ristics		•	•	
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA, I _B = 0	-40		V
BV _{CBO}	Collector-Emitter Breakdown Voltage	$I_{\rm C} = -100 \mu {\rm A}, I_{\rm E} = 0$	-50		V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_{E} = -100 \mu A, I_{C} = 0$	-5.0		V
СВО	Collector Cut-off Current	$V_{CB} = -30V, I_E = 0$		-100	nA
		$V_{CB} = -30V, I_E = 0, T_A = 100^{\circ}C$		-10	μA
EBO	Emitter Cut-off Current	$V_{EB} = -4V, I_{C} = 0$		-100	nA
On Characte	ristics *				
٦FE	DC Current Gain	$V_{CE} = -2.0V, I_{C} = -10mA$	300	800	
		$V_{CE} = -2.0V, I_{C} = -500mA$	250		
		$V_{CE} = -2.0V, I_{C} = -1.0A$	200		
		$V_{CE} = -2.0V, I_{C} = -2.0A$	150		
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -500mA, I _B = -5.0mA		-0.25	mV
		I _C = -1.0A, I _B = -10mA		-0.45	
		I _C = -2.0A, I _B = -50mA		-0.75	
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -1.0A, I _B = -10mA		-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -1.0A, V _{CE} = -2.0V		-1.0	V
	Characteristics		•	•	
T	Transition Frequency	I _C = -50mA, V _{CE} = -5.0V,	100		MHz
-		f = 50MHz			
Pulse Test: Pulse	Width ≤300µs, Duty Cycle ≤ 2.0%	•	•	•	

Symbol	Parameter	Max.	Units
PD	Total Device Dissipation	2	W
$R_{ extsf{ heta}JA}$	DJA Thermal Resistance, Junction to Ambient 62.5 °C/W		°C/W

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