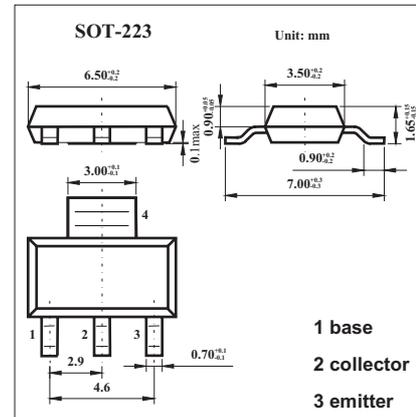


NPN Silicon Planar Medium Power High Gain Transistor FZT692B

■ Features

- High gain + very low saturation voltage.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	70	V
Collector-emitter voltage	V_{CE0}	70	V
Emitter-base voltage	V_{EB0}	5	V
Peak pulse current	I_c	2	A
Continuous collector current	I_{CM}	5	A
Power dissipation	P_{tot}	2	W
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

FZT692B

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Breakdown Voltages	V _{(BR)CBO}	I _C =100μA	70			V
Breakdown Voltages	V _{(BR)CEO}	I _C =10mA *	70			V
Breakdown Voltages	V _{(BR)EBO}	I _E =100μA	5			V
Cut-Off Currents	I _{CBO}	V _{CB} =55V			0.1	μA
Cut-Off Currents	I _{EBO}	V _{EB} =4V			0.1	μA
Saturation Voltages*	V _{CE(sat)}	I _C =0.1A, I _B =0.5mA I _C =1A, I _B =10mA I _C =2A, I _B =200mA			0.15 0.5 0.5	V
Saturation Voltages	V _{BE(sat)}	I _C =1A, I _B =10mA			0.9	V
Base-emitter ON voltage *	V _{BE(on)}	I _C =1A, V _{CE} =2V			0.9	V
Static Forward Current Transfer Ratio *	h _{FE}	I _C =100mA, V _{CE} =2V I _C =500mA, V _{CE} =2V I _C =1A, V _{CE} =2V	500 400 150			
Transitional frequency	f _T	I _C =50mA, V _{CE} =5V f=50MHz	150			MHz
Input capacitance	C _{ibo}	V _{EB} =0.5V, f=1MHz		200		pF
Output capacitance	C _{obo}	V _{CB} =10V, f=1MHz		12		pF
Turn-on time	t _(on)	I _C =500mA, V _{CC} =10V		46		ns
Turn-off time	t _(off)	I _{B1} =I _{B2} =50mA		1440		ns

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

Marking	FZT692B
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