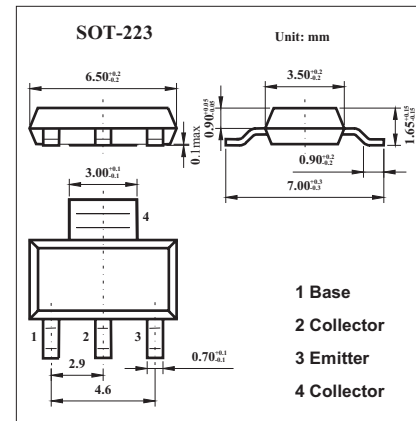


NPN Silicon Planar High Voltage Transistor

FZT458

■ Features

- Collector-emitter voltage: $V_{CE0} > 400V$
- Collector current-continuous: $I_C = 300mA$
- Complementary to FZT558

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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	400	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	5	V
Continuous Collector Current	I_C	300	mA
Peak Pulse Current	I_{CM}	1	A
Base Current	I_B	200	mA
Power Dissipation at $T_{amb}=25^\circ C$	P_{tot}	2	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ C$

FZT458

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Max	Unit
Breakdown Voltages	V _{(BR)CBO}	I _C =100μA	400		V
Breakdown Voltages	V _{CEO(sus)}	I _C =10mA*	400		V
Breakdown Voltages	V _{(BR)EBO}	I _E =100μA	5		V
Collector Cut-Off Currents	I _{CBO}	V _{CB} =320V		100	nA
	I _{CEs}	V _{CE} =320V		100	nA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =4V		100	nA
Emitter Saturation Voltages	V _{CE(sat)}	I _C =20mA, I _B =2mA*		0.2	V
		I _C =50mA, I _B =6mA*		0.5	V
	V _{BE(sat)}	I _C =50mA, I _B =5mA*		0.9	V
Base-Emitter Turn On Voltage	V _{BE(on)}	I _C =50mA, V _{CE} =10V*		0.9	V
Static Forward Current Transfer Ratio	h _{FE}	I _C =1mA, V _{CE} =10V	100		
		I _C =50mA, V _{CE} =10V*	100	300	
		I _C =100mA, V _{CE} =10V*	15		
Transition Frequency	f _T	I _C =10mA, V _{CE} =20V, f=20MHz			MHz
Collector-Base Breakdown Voltage	C _{obo}	V _{CB} =20V, f=1MHz		5	pF
Switching times	t _{on}	I _C =50mA, V _{CC} =100V	135 Typical		ns
	t _{off}	I _{B1} =5mA, I _{B2} =-10mA	2260 Typical		ns

* Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤ 2%