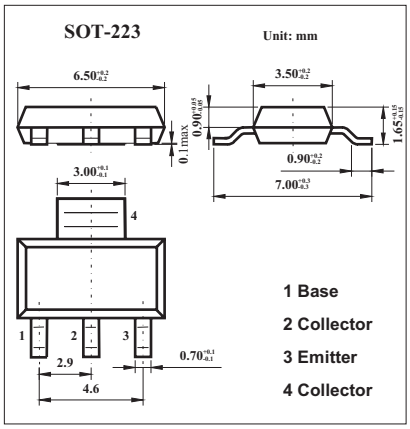
NPN Silicon Planar High Voltage Transistor

FZT658



■ Features

- 400 Volt V_{CEO}
- Low saturation voltage

■ Absolute Maximum Ratings Ta = 25℃

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
Peak Pulse Current	I_{CM}	1	A
Continuous Collector Current	I_C	0.5	A
Power Dissipation at T_{amb}=25℃	P_{tot}	2	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	℃

FZT658

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ.	Max	Unit
Breakdown Voltage	$V_{(BR)CBO}$	I_C=100μA	400			V
Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA*	400			V
Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA	5			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=320V			100	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4V			100	nA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=20mA, I_B=1mA*			0.3	V
		I_C=50mA, I_B=5mA*			0.25	V
		I_C=100mA, I_B=10mA			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=100mA, I_B=10mA*			0.9	V
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	I_C=100mA, V_{CE}=5V*			1.0	V
Static Forward Current Transfer Ratio	h_{FE}	I_C=1mA, V_{CE}=5V*	50			
		I_C=100mA, V_{CE}=5V*	50			
		I_C=200mA, V_{CE}=10V*	40			
Transition Frequency	f_T	I_C=10mA, V_{CE}=20V,f=20MHz	50			MHz
Output Capacitance	C_{obo}	V_{CB}=20V, f=1MHz			10	pF
Switching Times	t_{on}	I_C=100mA, V_{CC}=100V			130	ns
	t_{off}	I_{B1}=10mA, I_{B2}=-20mA			3300	ns

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

■ Marking

Marking	FZT658