

# SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

FZT758

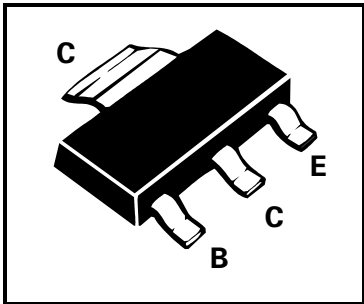
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## FEATURES

- \* 400 Volt  $V_{CEO}$
- \* 0.5 Amp continuous current
- \* Low saturation voltage

COMPLEMENTARY TYPE – FZT658

PARTMARKING DETAIL – FZT758



## ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	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	$I_C$	-500	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	$^{\circ}C$

## ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-400		V	$I_C=-100\mu A$
Collector-Emitter Breakdown Voltage	$V_{CEO(SUS)}$	-400		V	$I_C=-10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E=-100\mu A$
Collector Cut-Off Current	$I_{CBO}$		-100	nA	$V_{CB}=-320V$
Collector Cut-Off Current	$I_{CES}$		-100	nA	$V_{CE}=-320V$
Emitter Cut-Off Current	$I_{EBO}$		-100	nA	$V_{EB}=-4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.30 -0.25 -0.50	V	$I_C=-20mA, I_B=-1mA$ $I_C=-50mA, I_B=-5mA^*$ $I_C=-100mA, I_B=-10mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	V	$I_C=-100mA, I_B=-10mA^*$
Base-Emitter Turn On Voltage	$V_{BE(on)}$		-1.0	V	$I_C=-100mA, V_{CE}=-5V^*$
Static Forward Current Transfer Ratio	$h_{FE}$	50 50 40			$I_C=-1mA, V_{CE}=-5V$ $I_C=-100mA, V_{CE}=-5V^*$ $I_C=-200mA, V_{CE}=-10V^*$
Transition Frequency	$f_T$	50		MHz	$I_C=-20mA, V_{CE}=-20V$ $f=20MHz$
Output Capacitance	$C_{obo}$		20	pF	$V_{CB}=-20V, f=1MHz$
Switching times	$t_{on}$ $t_{off}$	140 2000	Typical Typical	ns ns	$I_C=-100mA, V_{CC}=-100V$ $I_{B1}=10mA, I_{B2}=-20mA$

\* Measured under pulsed conditions. Pulse width=300 $\mu s$ . Duty cycle  $\leq 2\%$

Spice parameter data is available upon request for this device

## TYPICAL CHARACTERISTICS

