

SOT223 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

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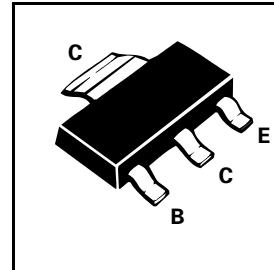
FEATURES

- * High V_{CEO} – 350V
- * Low saturation voltage

COMPLEMENTARY TYPE – BSP16

PART MARKING DETAIL – BSP19

BSP19



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	400	V
Collector-Emitter Voltage	V_{CEO}	350	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 $T_{amb}=25^\circ\text{C}$	P_{tot}	2	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	400			V	$I_C=100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	350			V	$I_C=10\text{mA}^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E=100\mu\text{A}$
Collector Cut-Off Current	I_{CBO}			20	nA	$V_{CB}=300\text{V}$
Emitter Cut-Off Current	I_{EBO}			0.1	μA	$V_{EB}=3\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$			0.5	V	$I_C=50\text{mA}, I_B=4\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(\text{sat})}$			1.3	V	$I_C=50\text{mA}, I_B=4\text{mA}^*$
Static Forward Current Transfer Ratio	h_{FE}	40 50				$I_C=20\text{mA}, V_{CE}=5\text{V}^*$ $I_C=100\text{mA}, V_{CE}=5\text{V}^*$
Transition Frequency	f_T	70			MHz	$I_C=10\text{mA}, V_{CE}=10\text{V}$ $f = 20\text{MHz}$
Output Capacitance	C_{obo}			10	pF	$V_{CB}=20\text{V}, f=1\text{MHz}$

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

Spice parameter data is available upon request for this device
For typical characteristics graphs see FZT658 datasheet.