

SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 – FEBRUARY 1996

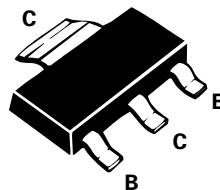
FEATURES

- * High V_{CE0}
- * Low saturation voltage

COMPLEMENTARY TYPE: – BSP20

PARTMARKING DETAIL: – BSP15

BSP15



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-200	V
Collector-Emitter Voltage	V_{CEO}	-200	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 $T_{amb}=25^{\circ}C$	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	$V_{(BR)CBO}$	-200		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-200		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}		-1	μA	$V_{CB} = -175V$
Emitter Cut-Off Current	I_{EBO}		-20	μA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		- 2.0 -0.5	V V	$I_C = -50mA, I_B = -5mA^*$ $I_C = -30mA, I_B = -3mA^*$
Static Forward Current Transfer Ratio	h_{FE}	30	150		$I_C = -50mA, V_{CE} = -10V^*$
Transition Frequency	f_T	15		MHz	$I_C = -10mA, V_{CE} = -20V^*$ $f = 20MHz$
Output Capacitance	C_{obo}		15	pF	$V_{CB} = -10V, f = 1MHz$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMTA92 datasheet.